



**1,300,000,000 MACS? P.15**

How hardcore Mac addicts will conquer China—one Mac at a time.



**eMAC VS. iMAC P.42**

We torture-test 'em both. And the winner is...

**84**  
**AUG**  
**2003**

# MacAddict

A BETTER MACHINE. A BETTER MACHINE.

**3RD ANNUAL**

## 50 TOUGHEST BUGS SQUASHED

**EXTERMINATED!**

**19 Mac OS X Glitches**

**ANNIHILATED!**

**19 Software Screw-Ups**

**TERMINATED!**

**12 Hardware Hassles**

**WIN!**  
Sony's  
gorgeous  
\$2,599 23-inch  
LCD display  
p.95

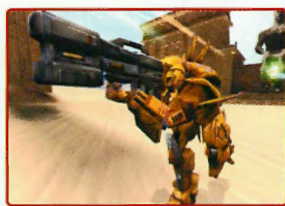


## INTERNET SERVICE DEATHMATCH

AOL vs EarthLink vs MSN vs Juno vs .Mac  
Our experts crown the online champ

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- Build a Custom Web Site
- Voice-Control Your Mac
- Broadcast Your Own News



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The Mac OS is far from perfect—but while we can't change it or the apps that depend on it, we can improve your experience when using it. Look no further than our third-annual troubleshooting guide. **by Dave Hamilton**



This is your Mac on bugs. Any questions?

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### 37 Absolutely Unreal

It's been a long wait, but fans of the Unreal series can finally rejoice. Unreal Tournament 2003 is here, and it's better-looking than ever. **by Cathy Lu**

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### 64 Control Your Mac with Your Voice

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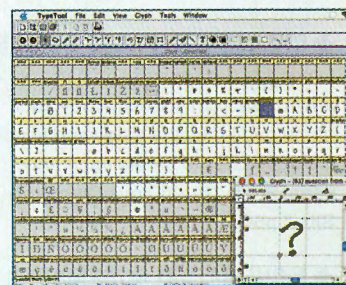
I got you, babe...

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### 68 Design Your Own Font

We show you how to create a font version of your own handwriting or a stylized typeface for use in any app that supports text. **by Paul Yoon**



Descender? I don't even know her!



# every month

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We like Mac OS X, really, we do—it's just that we believe in calling 'em like we see 'em.

## 10 Get Info

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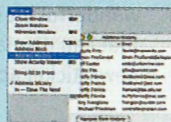
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## QUICK TIPS

FROM THIS MONTH'S ISSUE

### ➔ MAKE MAIL FORGET

If Mail keeps autocompleting an email address incorrectly, try going into your address history (Window > Address History) to delete old and unwanted addresses. **From "50 Biggest Mac Bugs," p16.**



### ➔ CREATE WEB PAGES QUICKER

Instead of designing each page on a Web site from scratch, copy your home page multiple times and tweak the duplicates to create each new page. **From "Build Your Own Web Site," p60.**

### ➔ MOVE SAFARI BOOKMARKS

To move Safari bookmarks from one Mac to another, just copy and transfer

the Bookmarks.plist file (stored in your Library > Safari folder).

**From Ask Us, p58.**

### ➔ SLIM DOWN IPHOTO

Deleting a picture from iPhoto doesn't actually delete the file. To complete the process, you need to go to iPhoto's File menu and choose Empty Trash. **From "50 Biggest Mac Bugs," p16.**



### ➔ DOWNSIZE YOUR PICS

If you want your Web photo gallery to captivate an audience (and not exasperate it with slow downloads), scale down photos to 4 by 6 inches at 72 dpi. **From "Build Your Own Web Site," p60.**

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The best of the best from recent reviews. If the editors of MacAddict went shopping, this is what we'd buy.

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94 Letters

Our readers never cease to amaze us. This month, we've got Mac clocks, Mac coffee, the iPotty, and Lara Croft in the buff.

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96 Shut Down

It takes a lot for a product to earn our dreaded no-widget rating—and the results can be tragic.

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Look, Ma—no cell phone!



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# the disc Unreal!

Sometimes our monthly Disc is so freakin' great that we just can't stand ourselves—and this month is one of those times. Unreal Tournament, unreal Web power, unreal audio, and over 80 more great apps. Pinch yourself—it's all real.

## Unreal Tournament 2003 demo

The long-awaited sequel to one of the best games of all time has arrived. Play it today.



## Moog Modular V1.1 demo

The analog synths of the 1960s and 1970s created incredible sounds—and so does this digital tribute to one of the best.



## Dreamweaver MX 6.1 trial

On page 60 we tell you how to create your own Web site. On the Disc, we give you the tools.



## on the Disc AUDIO & MUSIC

Audacity 1.1.3  
Doggiebox 1.0.3  
iPiano 2.0.2  
M-Beat 1.26  
Moog Modular V 1.1 demo

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Dreamweaver MX 6.1 trial  
iBlog 1.3  
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REALbasic OS X 5.1.1 demo  
RPGMapMaker 2.9  
VLC Source 0.5.3  
WebDesign 2.1.1

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DeepTrouble 1.0.4  
Energy 1.01  
Gutterball 1.2H  
Hang3000 2.1  
Orbz 2.0 demo  
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QBz 1.6E  
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Unreal Tournament 2003 demo

## GRAPHICS & MULTIMEDIA

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GraphicConverter 4.6.1  
GraphicConverter X 4.6.1  
iChalk 2.02

IconBox 1.0.1  
IconCompo 2.2  
ImageBuddy 2.8.2  
Live Channel Pro 2.0 demo  
MacGhostView 2.7  
Morph Age 1.2  
Movie Jukebox 1.1.1  
MovieWorks Deluxe X 6.0 trial  
Sonicfire Pro 3 demo  
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TalaPhoto X 2.0.1  
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iCash 1.3

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iStorm 2.02  
iText (OS 7 to 9) 3.0.4E  
iText (OS X) 3.0.4E  
iWork 1.3.4  
LightWayText X 4.0.4  
SafeCat (Classic) 5  
SafeCat X 5.dmg  
SafeDog (Classic) 7  
SafeDog X 7.dmg  
Ten Thumbs Typing Tutor 2.3.3

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De\_DDS 1.0  
DiskTracker 2.3  
DiskTracker (OS X) 2.3  
DVD Capture 2.0  
Gadget (OS 9) 1.4  
Gadget (OS X) 1.4  
iPulse 1.0.3  
LogoSender Classic 1.1.9  
LogoSender X 1.2.2  
PrefsOverload 5.2  
Print Center Repair 3.0  
Pseudo 1.2.3  
Safari Enhancer 2.0.1  
Suitcase 10.2.2 demo  
TinkerTool 2.32  
XBattery 0.6.1

## SPONSORS

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Live video promo  
DriveSavers: Lost Data video promo  
REAL Software: REALbasic Classic 5.1.1 demo  
REAL Software: REALbasic OS X 5.1.1 demo

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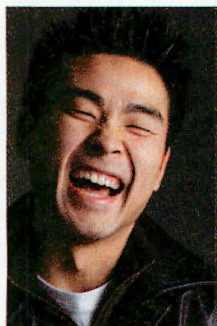
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## The joy of six.



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*Creates prepress  
automation  
programs*



**Angela**  
Scientist  
*Creates data  
analysis programs*



**Kyle**  
Teenager  
*Creates games  
instead of playing  
them*



**Kelli**  
Teacher  
*Creates educational  
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# Of Bugs and Men

The first step toward solving a problem is admitting you have one.



This issue marks the third anniversary of the way-popular "50 Bugs" series we began back in 2001. Seems like only yesterday, but, as Groucho said, "Time flies like an arrow; fruit flies like a banana."

Last year's bugsapalooza focused on Mac OS X and its growing pains. Good advice, good tips, good troubleshooting tricks—and the source of one of the strangest *scheiss* storms to inundate yours truly in my nearly 15 years in the Mac-mag biz.

I first knew something was amiss when I was dining with a few Mac-industry bigwigs. One gloweringly told me that I should be shot, sacked, racked, and made to watch home videos of Steve Ballmer as a baby for publishing a cover story suggesting that Mac OS X was anything less than the Second Coming. I dismissed his choler as a byproduct of the eternal struggle between marketing and truth, and thought little more of it.

Then I arrived back in my office and downloaded my email—and read that he wasn't alone. Many of you, dearest readers, also took me to task. Interestingly, though, you weren't afraid that talking about OS X's bugs might affect its adoption, but rather that by doing so we were giving aid and comfort to the "Let's boot the Macs out of this company" gang.

So why are we again exposing Mac OS X's peccadilloes to the world? To slow its adoption? To provide excuses for the Mac-hating Wintel cabal? Of course not.

We're writing about how to overcome OS X glitches because we're dedicated to helping you get the most out of your Mac. And keeping it bug-free (well, bug-lite, at least) is certainly central to that goal.

So sit back, relax, turn to page 16, and dig into Dave Hamilton's sage advice. And don't worry that we're providing ammunition to the "Macs out!" mob. *Au contraire, mon ami*—we're helping you show those nits that your Mac is doing quite well, thankyouverymuch, and that they should go back to staring at their Blue Screens of Death.

Enjoy,

R.k

## from the editor's desktop

### HERE'S WHERE TO FIND MORE MAC HELP.

No mere magazine article can address everything that might possibly go wrong with your Mac. Fortunately, the Web is packed with help. If you're a seasoned Mac expert, you already have the following sites in your Safari Bookmarks bar. If you're a newbie, you should—if only to find out how a seasoned Mac expert gets his or her seasoning.

#### MacInTouch

[www.macintouch.com](http://www.macintouch.com)  
The M.I.T. of Mac forums. Here's where the really smart folks hang out—where problems are first reported; where intelligent discussion rules; where solutions are offered, tested, and tweaked.

#### MacFixIt

[www.macfixit.com](http://www.macfixit.com)  
Great source of news, informed discussion, and troubleshooting tips. To access the site's detailed reports, however, you must become a MacFixIt Pro member—but at \$24.95 per year, it's a bargain.

#### Computing.Net

[www.computing.net](http://www.computing.net)  
To be honest, one of the reasons I enjoy this site is to gloat over all the keening and kvetching in the Windows-only forums. The Mac-specific info, however, is also a treat: deep and informative.

#### VersionTracker

[www.versiontracker.com](http://www.versiontracker.com)  
This extremely popular service is not a troubleshooting site per se, but rather an exhaustive and up-to-date listing of Mac software, shareware, freeware, and donationware. An invaluable resource.

## STAFF RANTS

**Q:** What's the most infuriating bug you've ever encountered?



**Narasu Rebbapragada** ARTHROPODALLY CHALLENGED  
**What's the most infuriating bug you've ever encountered?**  
Even though I'm neither African nor a queen, I'd have to say a blood-sucking leech. That qualifies as a bug, right?



**Niko Coucouvanis** MR. CREAT  
**What's the most infuriating bug you've ever encountered?**  
It's not so much a particular bug as a genus: the wily bugs that masquerade as productivity-enhancing features, when all they really do is annoy me and waste my precious time—like Microsoft Office's stupid little dancing Assistant guy, or the placement of the Help key right next to Delete on the keyboard. Whose idea was *that*?



**Kris Fong** EASILY BUGGED  
**What's the most infuriating bug you've ever encountered?**  
Z—that obnoxiously whiney, Woody Allen-voiced nebbish in Antz. Ten minutes into the movie, I prayed that someone would break out the Raid.



**Cathy Lu** BILINGUAL BUT NOT NORDIC  
**What's the most infuriating bug you've ever encountered?**  
I once plugged a Canon digital camera into my Mac and all my peripheral-related dialog boxes started to appear in Norwegian—or some Nordic language. Luckily it only took reinstalling Mac OS X to fix it. Good-bye, Saturday afternoon.



**Jenifer Morgan** RAID ARRAYED  
**What's the most infuriating bug you've ever encountered?**  
A terrifyingly resilient cockroach I encountered years ago...I employed everything but a bayonet to no avail. It and its stinking brethren live on.



**Chris Imlay** EMPLOYEE OF THE MONTH  
**What's the most infuriating bug you've ever encountered?**  
QuarkXPress 4.0. It was a dismal, foul, crashing headache—the Word 6.0 of layout apps. And it took Quark two years to fix it with the release of XPress 4.1.



**Peter Marshutz** THE NEW GUY  
**What's the most infuriating bug you've ever encountered?**  
I used the Mac OS X Software Update feature to update iPhoto...and discovered that my entire photo library was written over and couldn't be recovered. Apple tech support said that it couldn't help, but that it was aware of the bug. Small comfort.



**Max** ENTOMACOLOGIST  
**What's the most infuriating bug you've ever encountered?**  
"The application [insert practically any app name here] has unexpectedly quit. The system and other applications have not been affected." The system and other apps may not have been affected, but my mood certainly has been.





FORGOTTEN REALMS

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# TUNE WARS!

## Apple's Music Store Started Off Strong—but Can It Last?



Apple's new online music service launched with a sonic boom that muffled a few startup squeaks. As the early excitement fades, the larger question remains: Will Apple's pay-to-play business model live long like *Dark Side of the Moon* or fizzle quickly like the Macarena?

Apple's pay-per-download service differs from that of its subscription-based competitors, Rhapsody and Pressplay, which charge about 10 bucks a month for unlimited listening privileges plus additional fees for burning. So far, Mac music lovers seem to prefer buying over renting.

"Clearly, purchasing on a per-track basis is similar to current buying behaviors," says Gartner G2 research director P. J. McNealy. "The 99-cent pricing looks like a magical price point."

### Startup Snafus

Apple's startup, however, has not

been free of glitches. Some of the brainiac gearheads who swap stories at MacInTouch ([www.macintouch.com](http://www.macintouch.com)) reported trouble with billing and interrupted downloads. Then there was the day the music died: Some tunes—such as those from alt-rock band Radiohead—that were downloadable one day vanished from iTunes the next. Apple chalks up that problem to the accidental posting of tracks for which record labels did not own all the rights.

### Apple Goes Indie

One class of music is missing altogether: indie. Apple launched the iTunes Music Store with 200,000 tracks from the Big Five major-label record companies—BMG, EMI, Sony, Warner Bros., and Universal—with nary a track from independent U.S. labels.

"Apple went to lunch with the Big Five without us—'those turkeys,'" jokes Josh Ayala, the new media director of Subpop

records, which distributes alt-star bands like Soundgarden and the Supersuckers. "We always like to be in the system when it launches."

Subpop might very well be—and soon. Apple hosted delegates from indie labels like Subpop at a June 5 event in Cupertino. According to Derek Silvers of CD Baby ([www.cdbaby.com](http://www.cdbaby.com)), Jobs invited independent labels to put music up on the iTunes Music Store, offering a licensing structure based loosely on Apple's major label contracts.

### The Competition

At Apple's April 28 launch event, Steve Jobs compared the iTunes Music Store to two other players: Pressplay ([www.pressplay.com](http://www.pressplay.com)) and Rhapsody ([www.listen.com](http://www.listen.com)). On May 19, Roxio acquired Pressplay, a joint venture of Universal Music Group and Sony Music Entertainment. Roxio will rename Pressplay as Napster, which it purchased last year. (See "Comparing Apple to Oranges," left, for the differences between the services.)

Both Pressplay and Rhapsody, not surprisingly, are wary of Apple's listen-for-30-seconds-then-pay-per-download model. "That's like going into a fancy restaurant [where they're] giving you one bite and asking you if you want to buy the whole meal," says Rhapsody spokesperson Matt Graves.

It's unclear which model is better. "We believe that both the subscription model and the pay-per-track model make sense," says Scott Steinberg, Roxio's VP of strategic marketing.

While Apple's model mimics CD buying, the record labels see benefits to the monthly subscription model. "They love the marketing hook of people coming back every month," McNealy says. Plus, Apple will need high-volume sales to maintain profitability. McNealy estimates

## COMPARING APPLE TO ORANGES

The iTunes Music Store's two main competitors are Windows only—so far. Here's how their features compare.

Service	iTunes Music Store	Rhapsody	Pressplay
<b>Owned and Operated by</b>	Apple	Listen.com	Roxio
<b>Accessed via</b>	iTunes 4 ( <a href="http://www.apple.com">www.apple.com</a> )	<a href="http://www.listen.com">www.listen.com</a>	<a href="http://www.pressplay.com">www.pressplay.com</a>
<b>Mac Friendly?</b>	Yes, but Mac OS 10.2 only	No	No
<b>Streamed Music Library</b>	30-second previews of 200,000 songs	330,000 full songs	300,000 full songs
<b>Cost to Stream</b>	Free (30-second previews only)	\$9.95 per month	\$9.95 per month
<b>Burnable Music Library Size</b>	200,000 songs	200,000 songs	270,000 songs
<b>Cost to Burn</b>	99 cents per track, approx \$10 per full album	79 cents per track	\$17.95 per month for ten songs (additional songs extra)
<b>File Format</b>	AAC	Windows Media 8	WMA
<b>The Catch</b>	You must shell out 99 cents to listen to—and own—an entire track. Hardware support for AAC file format is currently limited to Macs and iPods.	You must pay extra to burn to CD. You can't download anything to your hard drive.	You have to pay extra to burn to CD. Downloaded tracks disappear if you end your subscription.





that 60 to 65 cents of Apple's 99 cents per song goes to the record labels.

### Windows of Opportunity

Right now, comparisons between Apple, Pressplay, and Rhapsody are irrelevant, since Apple is Mac only

(<http://drumbeat.info>). "They're not having to face the challenge of the P2P networks," says Seth Oster, spokesperson for Pressplay. "But they will face that, and then they'll experience what we all do."

Then there's the hardware issue.

**"The 99-cent pricing looks like a magical price point."**

—P. J. McNealy

and the latter two are Windows only. When Apple launches its iTunes Music Store for Windows at the end of the year, that will level the field.

One battle will be against pirates. Thus far, Apple has been insulated from file-sharing networks like Kazaa and Morpheus—PC-only hotbeds of illegal MP3 trading—and has disassociated itself from P2P (peer-to-peer) Mac apps such as LimeWire ([www.limewire.com](http://www.limewire.com)) and Drumbeat

Songs purchased on the iTunes Music Store are playable only on Macs and iPods. That limitation works fine for Mac users, but Windows users with more portable player options may find this limitation, well, limiting.

One thing everyone agrees on, however, is that Apple has brought pizzazz to the online music industry. Whether big buzz translates to big bucks, though, is another question entirely.—Narasu Rebbapragada

## iRAQ IPOD

Apple's Music Player Thrives in the Middle East

Marine Corporal Jose Avila put his iPod through the ultimate hardware stress test. He brought it to Iraq.

A combat photographer with the 11th Marine Expeditionary Unit, currently stationed at Camp Commando Marine Corps Base in Kuwait, Avila toted his iPod through 120-degree heat in cities such as Al Nasariya, Al Kut, and Baghdad. Avila says the locals are fascinated with the iPod. "Every time I take it out people are curious and full of questions," he says, "[asking] how can you carry hundreds of CDs in such a small package." Avila says his iPod doesn't weigh his gear down and "has proven itself combat worthy."—NR



Marine Corporal Avila carries his music along with his M-16.

PHOTOGRAPH COURTESY OF MARINE CORPORAL CALVIN W. BARCLAY

## NEW STUFF

### DIGITAL DJ-WARE

#### Final Scratch

\$699	Available: Now
Stanton Magnetics	<a href="http://www.finalscratch.com">www.finalscratch.com</a>

**What it is:** The Final Scratch software-hardware combo lets DJs use their familiar tools (turntables and mixers) and skills to spin MP3, WAV, and AIFF files stored on a Mac. DJs place two Final Scratch records on their existing



**Where it's at** is two turntables and a Mac.

turntables and spin them the way they would spin vinyl records. By manipulating the Final Scratch records, however, they are actually scrubbing through digital music files to mix and beat-match music.

**Why it's cool:** Final Scratch could spell the end of vinyl or—more realistically—present a viable alternative.

### AFFORDABLE COLOR LASER

#### Color LaserJet 1500

\$799	Available: Now
Hewlett-Packard	<a href="http://www.hp.com">www.hp.com</a>

**What it is:** A compact USB color laser printer that prints 16 ppm (pages per minute) in black and white and 4 ppm in best-quality color. See our review on page 47.

**Why it's cool:** It's the lowest-priced Mac-compatible color laser printer available today.

### EXCEL CHALLENGER

#### Deltagraph 5

\$299	Available: Now
Red Rock Software	<a href="http://www.redrocksw.com">www.redrocksw.com</a>

**What it is:** Five years after SPSS released Deltagraph 4.5, Red Rock Software licensed this old-school 2D and 3D charting application from SPSS and revamped it for OS X only. While version 5 has the same feature set as version 4.5, Red Rock Software has worked out the kinks in its AppleScripting.

**Why it's cool:** If you're sick of Excel's limited charting capabilities, DeltaGraph is a robust alternative, with more than 50 mathematical and statistical functions for analyzing and presenting data.





## DROOLWORTHY

Sexy Stuff We Can't Wait to Get Our Mitts On

### MP3 and FM Player →

**iRiver's iFP-395T** (\$379.99, [www.iriveramerica.com](http://www.iriveramerica.com)) MP3 player sails from Korea to North America this June. About the size of a Twinkie and the weight of a pen, the iFP-395T comes with 512MB of memory, 128-Kbps real-time MP3 encoding (for recording radio), and an FM tuner; it can also double as a removable USB drive. Download the Mac drivers from iRiver's Web site.—NR



PHOTOGRAPH COURTESY OF IRIVER

### ← USB Storage Watch

**Allied Data Technologies' Tornado 64MB and 128MB USB Memory Watches** (\$59.95 or \$79.95, [www.allieddata.com](http://www.allieddata.com)) plug right into your Mac and work just like normal USB Flash drives—with the added bonus that they tell time. Sure, a short portion of the built-in USB cable doesn't detach, but that's stylish, right?—NR



PHOTOGRAPH COURTESY OF ALLIED DATA TECHNOLOGIES






# BE YOUR OWN BROADCASTER

Our FAQ on Video-Streaming Software

Watching streaming media is fun; pushing it over the Internet is a whole new experience. Thanks to some Mac OS X software packages, however, you're just a download away from becoming a streaming-media broadcaster. Here are the answers to some frequency asked questions to get you started. Also check out our how-to on broadcasting a news feed on p66.—Tom Lassiter

**TIP** If you use a router to share your Internet connection over a LAN, remove it. It is much easier to stream with a direct connection to your Mac.



	PLACE TO START	DIY TV STUDIO	TECHIE'S DELIGHT
<b>What Is It?</b>	QuickTime Broadcaster 	Live Channel Pro 2.0 	VideoLAN Client 
<b>Where Do I Get It?</b>	Apple Computer (www.apple.com), free	Channel Storm (www.channelstorm.com), \$999; \$699 educational	VideoLAN Project (www.videolan.org), free
<b>What Hardware Do I Need?</b>	PowerPC G3 or later (G4 recommended for MPEG-4 streams)	PowerPC G3 or later, native FireWire	No official requirements
<b>What Software Do I Need?</b>	Mac OS 10.1.3 or later, QuickTime 6.0.2 or later	Mac OS 10.1.5 or later, QuickTime 5.0.2 or later	Mac OS X
<b>How Many Internet Viewers Can I Stream To?</b>	One, but add a copy of OS X Server (\$499) and the built-in QuickTime Streaming Server, and you can stream to hundreds more.	Up to 100, but add a copy of OS X Server (\$499) and the built-in QuickTime Streaming Server, and you can stream to hundreds more.	One. Step up to the VideoLAN Server to reach hundreds more viewers, as well as broadcast satellite and digital terrestrial (non satellite) TV channels. Oh, and it's free too.
<b>Can I Add Any Special Effects?</b>	No	Yes—multiple layers, picture-in-picture and split-screen layouts, text titling, overlay graphics, effects and transitions	No
<b>What Kind Of Video And Audio Can I Stream?</b>	QuickTime and its built-in formats	QuickTime and its built-in formats	Video: MPEG-1, MPEG-2, MPEG-4, DivX, WMV, H/1 263. Audio: MPEG Layer 1, 2, 3; MPEG-4; AC3
<b>What's The Bottom Line?</b>	QuickTime Broadcaster is the best choice for the novice Webcaster, since it's free and easy to set up.	Live Channel Pro's deceptively simple interface masks a powerful and feature-rich tool that lets you be your own TV studio.	VLC is free but open source, so there's no official tech support. VideoLAN Server is also free, but for tech heads only.

## NEWS OF THE MONTH

### FINALLY, BOOTABLE DISC UTILITIES

Although Mac OS X is rapidly approaching its third major incarnation, we're only just now seeing availability of full-featured Mac OS X-bootable diagnostic and disc repair utilities. Micromat's Drive 10 has been OS X bootable from the get-go (\$69.95, www.micromat.com) but its full-featured sibling TechTool Pro 4 (\$97.98 estimate)—with additional RAM and device tests—now joins it, as does Symantec's Norton Utilities 8.0 (\$99.95, www.symantec.com).

### NASA PUTS OUT MAC SOFTWARE

In the "Gee Whiz" category, NASA is beta-testing a Mac OS X aerospace engineering application that it plans to release to the public in June 2003. Called TetrUSS (http://ad-www.larc.nasa.gov/tsab/tetruss), this "unstructured-grid computational fluid dynamic (CFD) software system" (their words, not ours) performs advanced flow analysis and aerodynamic design. TetrUSS will be free to US users, and NASA Langley is offering interested parties a free one-week training program.

### NEW EMACS

Apple has speed-bumped and price-dropped its eMac line. The new top-of-the-line 1GHz eMac G4 (see our review on p42) comes with a 4X DVD-R SuperDrive for \$1,299, and a 32X write-speed Combo DVD-R/CD-RW drive for \$999. Taking the new Least Expensive Mac title is the \$799 800MHz eMac, which includes a 32X read CD-ROM.

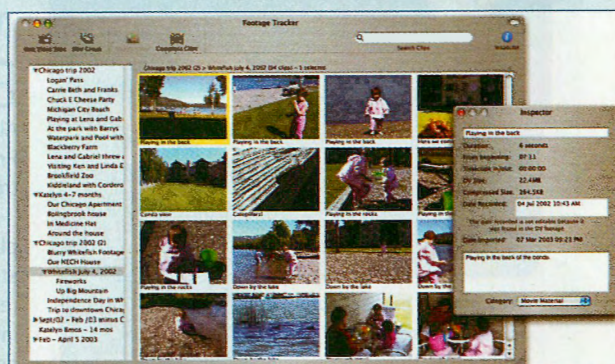
## SHAREWARE PICK OF THE MONTH

### FOOTTRACK

T-Squared Software <http://foottrack.com> \$29.95

Like your library's old card catalog file, FootTrack takes clips imported into iMovie from DV or analog videotapes, compresses them, and catalogs them so that you can store the original video somewhere other than your hard drive, saving space. Catalog compressed clips any way you want and search for them using an iTunes-style search window. Be

forewarned: Clips take a while to compress. T-Squared Software says that on a 667MHz PowerBook, 60 minutes of video took 50 minutes to compress down to a mere 180MB.—NR



Catalog compressed versions of your old home videos so you can store the originals somewhere other than your hard drive.



## THE FROZEN THRONE COMETH

Blizzard to Release Expansion Pack for Award-Winning Strategy Game

Blizzard has raised the bar again for the real-time strategy genre with this WarCraft III expansion pack. The Frozen Throne's solo campaign chronicles the exploits of the four playable races (Humans, Orcs, Night Elves, and the Undead) as they recover from the last game's final battle and unlock the secrets of a new threat, a creature known as Illidan Stormrage.

Two new units per race are at your disposal, including the Humans' Spell Breakers and the Undead's Black Sphinx. Frozen Throne is bursting at the seams with gameplay-boosting features such as multiplayer play on Blizzard's free online service Battle.net (www.battle.net) and the advanced world editor for dreaming up maps with your own sounds and cinema scenes.—*Matt Osborn*



### WarCraft III: The Frozen Throne

Price	\$35.99
Available	Late 2003 (expected)
Blizzard Entertainment www.Blizzard.com	

Blizzard raises the real-time strategy bar with the Frozen Throne expansion pack.

## HANG TEN WITH KELLY SLATER

First came Tony Hawk's Pro Skater. Now here's Kelly Slater's Pro Surfer. Catch a wave toward 13 famous beaches with eight pro surfers and six-time World Champ, Kelly Slater. Learn tube stunts, aeri-



The Mac's first pro surf sim makes a splash.

als, and other pro moves. Enter Career Mode to climb the circuit, but don't wipeout in front of sponsors. Check out the multiplayer game, but beware: Complex wave physics and graphics may send your Mac's memory into oxygen debt.—*MO*

### Kelly Slater's Pro Surfer

Price	\$23.99
Available	July 2003
Aspyr Media www.aspyr.com	

## WW II GOES RPG

Place Diablo's and Baldur's Gate's role-playing styles in a World War II scenario, and you get a tasty Molotov cocktail called Another War. Rescue your friend from the Third Reich and unravel a secret plot by Axis engineers. Dodge bullets from France to Leningrad, graced by high-quality graphics rendered from a bird's-eye



MacPlay offers up a unique role-playing war game.

perspective. Considering game developer Mirage Interactive's World War II styling on the PC game Mortyr, expect a thrilling experience.—*MO*

### Another War

Price	\$29.99
Available	June 2003
MacPlay www.macplay.com	



Welcome to part two of Aliens vs. Predator's mutant deathmatch.

## ALIENS VS. PREDATOR, BACK AND BADASS

The First-Person Bug Hunt Continues

Experimental research on planet VL1201 has been dull lately, but when a rogue scientist tries to create controllable army of Xenomorphs (aka Aliens), all hell breaks loose. The Marines come to clean up the mess, the Predators—a species of hunting alien—take trophies, and the Aliens make lunch of them all.

As in the original Aliens vs. Predator, you can play either race as species clash in crisscrossing storylines. All your favorite weapons and abilities return from the first game, from the pulse rifle to the tail whip. New features include a fast pounce attack for the Aliens as well as the option to play as a baby alien (a face hugger). The Predator can now jump higher and immobilize its prey with a net gun. Marines get shotguns and spider mines, and they can blowtorch doors. Happy hunting, whatever you are.—*MO*

### Aliens Vs. Predator 2

Price	\$49.99
Available	July 2003
MacPlay www.macplay.com	



# THE PEOPLE'S REPUBLIC OF MACS

China's the Next Big Hardware Market—So Where's Apple?

Hardware manufacturers are saddled up to ride into the one of the last remaining tech frontiers: China. The question is, where's Apple?

SARS woes aside, China is one of the few countries right now with any good economic news. Its state news agency reported a 9 percent growth rate for its economy in the first quarter of 2003. It boasts the world's largest cell phone market and is set to surpass Japan as the second largest PC market. So far Apple has operated in relative anonymity in China, but an enterprising, grassroots Mac community is changing that.

"They want to see Apple become more visible," says Yan Feng, president of the Beijing Mac Users Group ([www.beimac.com](http://www.beimac.com)). "They want to see more Mac users in this nation."

Feng's 114-member group offers one good example of the Mac's following in China. An eclectic mix of students, designers, video professionals, and both Chinese and foreign nationals, the group meets once a month to talk Macs, see product demos, and bone up on tech skills. Feng himself is a Mac zealot. The self-proclaimed "Swiss expat

Wo concedes that Macs users in China face language barriers, "It doesn't have great Chinese-language programs, but I'll always come back to make sure I keep everything up to date. I want the latest in software and accessories."

That desire to buy is attracting retailers to China's mainland. One company with more than 10 years of Mac experience, the Hong Kong-based Designer Group Company, opened its China flagship store last year in Beijing's Oriental Plaza on the capital's best-known and most expensive shopping street, Wangfujing.

"Business is doing great," says store manager Catherine Ng. "So far, we're selling about 250 CPUs a month. People are thinking that finally they can get the software and accessories right here."

The shop already has two major corporate clients in Beijing: MTV and the Western Academy Beijing International School, which has at least 200 Macs. The Designer Group is planning to open another branch in Shanghai within a year.

With more Mac shops and more Mac users, China still needs a larger group of developers. To promote development, Apple runs an Apple Developer Connection program in Beijing that provides coding-level technical support and a hardware- and software-testing lab to developers in China, creating titles like the Atomix Chinese Dictionary and the Translate Star Chinese-English machine translation. Also, California-based graphics software developer ArcSoft houses its engineering and development teams in Hangzhou.

Feng is optimistic about Apple's future in China. "They're taking baby steps in the right direction," he says. "That, at the least, is pretty commendable."—*Narasu Rebbapragada and Peter Simpson*



Yan Feng is president of the Beijing Mac Users Group (Beimac).

PHOTOGRAPH COURTESY OF BEIMAC



Chinese shoppers play with and peer at Macs.

with a Chinese face" owns seven Macs, including a 500MHz iBook, a Power Mac 7500, and a working PowerBook 170. "Old habits die hard," he explains.

Diehards like Feng drive Mac sales in China. Wang Wo, 34, is a loyal Mac fan. "I started off with PCs until 1995, then I used a Mac, and I've never looked back," said the graphic designer, who runs a small design business. "It may be a little more expensive, but it's worth it."

A national network of authorized Apple Specialists, Resellers, Service Providers and Consultants.



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powered by **XP** Tech.com



# 50 Biggest Mac Bugs

## And How to Kill 'Em



**W**e have a love-hate relationship with Mac OS X. We love it for its power and beauty. We hate it for its occasional eccentric and inexplicable behavior.

Inexplicable till now, that is. We handpicked the most infuriating Mac OS X bugs, problems, quirks, and just plain annoyances, and we show you how to squash them—before they squash your sanity.

We also throw in a few application and hardware bugs that have driven us equally crazy, for a total of 50 frustrations that you now get to annihilate. For good. Guaranteed.

by Dave Hamilton  
illustration by Oliver Wolfson

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## Easy Bug Finder



It's time to break out your pocket pen protector.



These simple little tricks can make a big difference.



Time is money—and these tips will add to your account.

NOTE: We based all of our bugs on the latest release of Mac OS X as of press time: Mac OS 10.2.6. As Apple releases updates, some of the problems—and solutions—may change. And, of course, new problems will appear.

## System Screw-Ups

### 01 System Slowdown

**PROBLEM:** Sometimes when I have lots of apps open, my system starts moving sluggishly, my hard drive crunches constantly, and finally my Mac has a kernel panic.

**SOLUTION:** Yep, this can happen if you don't have enough RAM. You likely have too many applications open and Mac OS X is starting to make too-liberal use of its virtual memory capability.

If you notice this happening, quit your applications, then restart your Mac to let the virtual memory subsystem regain its composure (and release the extra disk space it has probably commandeered in the process of losing its cool). There's only one true solution if this problem plagues you often: Buy more RAM. Hey, it's cheap—so you shouldn't be.



### more on... virtual memory

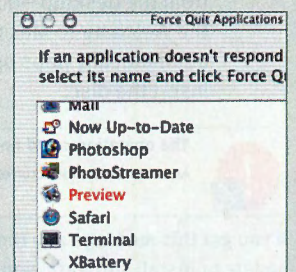
Virtual memory uses space on your hard disk to store things for which there is no longer room in RAM. This can work fine if you're just switching between apps and happen to have more open than RAM can accommodate. However, if one of those applications starts conversing with the OS or another application, virtual memory can start swapping back and forth and get caught in a nonstop loop.

### 02 Red Force Quit

**PROBLEM:** Sometimes an app's name turns red in the Force Quit dialog. What is my Mac trying to tell me?

#### SOLUTION:

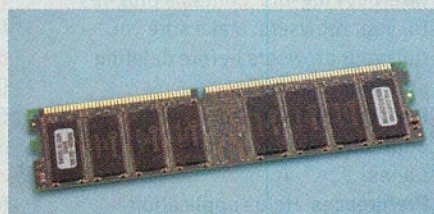
It's trying to tell you that the application has stopped responding and Mac OS X has all but given up on it. At this point, unless the app is doing something that is absolutely life-changing, force-quit it and move on. Note, though, that there may be times when an application (such as GraphicConverter) is doing some major data crunching in the background and may turn red for a period of time before it comes back to life. In these instances patience pays off.



When an app turns red in the Force Quit dialog, Mac OS X is trying to tell you it's just about given up on whatever the app's doing.



Cocktail 2.2.1, Pseudo 1.2.3, Suitcase 10.2.2 demo, TinkerTool 2.32, and XBattery 0.6.1



A Mac without enough RAM makes OS X very unhappy.

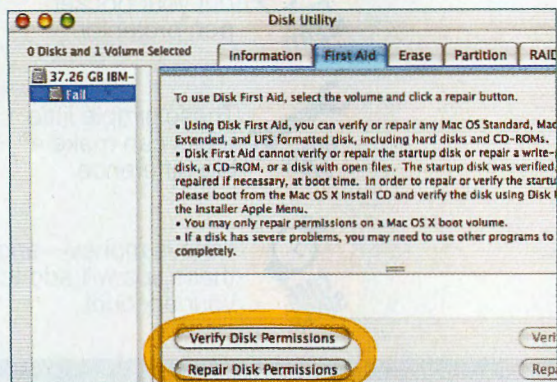


## REPAIR YOUR PERMISSIONS

Mac OS X, bless its Unix heart, sometimes gets confused as to who can read and write which files. However, the OS also provides a simple way of fixing this problem.

1. Run Disk Utility (Applications > Utilities).
2. Highlight your startup partition and click the First Aid tab.
3. Click Verify Disk Permissions.
4. If you get a report of any problems, click Repair Disk Permissions.

**HOW OFTEN:** Before and after any OS updates or installations.

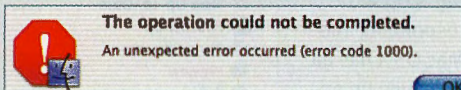


Use Apple's Disk Utility to ensure that Mac OS X's file privileges stay where they need to be.

### 03 Installer Woes

**PROBLEM:** Every time I try to install software, I get a dialog telling me an unexpected error occurred.

**SOLUTION:** Sounds like you have a damaged Installer application component. Thankfully, this problem is easy to fix: Just copy the Installer application from your most recent Mac OS X CD to the Applications > Utilities folder on your Mac. Inside the Applications > Utilities folder of your CD is a copy of the Installer app, but to find it you have to open the actual CD from the desktop—don't just look in the Welcome To Mac OS X folder that automatically pops open when you insert the disc.



If you get this message any time you want to update or install software, you need to reinstall the Installer. Now say that ten times fast.

### 04 Library Cleanout

**PROBLEM:** There are a bazillion OS X files on my drive and there's no way I need them all, right?

**SOLUTION:** Right—but to borrow a saying of Windows techies, if you don't know what something is, don't throw it away. That said, here are some folders in your Library that might contain data

you can trash—and make sure to check all three Libraries: Library, System > Library, and Users > user name > Library, since some of these puppies hide in one or more places.

- **Application Support** Contains settings and temp files for certain apps.
- **Audio > Sounds** Stores any custom sounds you may have added to your system.
- **CFMSupport** Keeps plug-ins for some Carbonized applications, such as Palm Desktop.
- **ColorSync** Might contain old ColorSync profiles.
- **Contextual Menu Items** Stores plug-ins for items that appear in certain apps' contextual menus.
- **Documentation** Contains read-me files and content for the Help system.
- **Fonts** Holds fonts you may or may not still use.
- **Image Capture TWAIN Data Sources** Might contain drivers for old scanners.
- **Internet Plug-Ins** Contains plug-ins for your browsers. Make sure you quit your browsers before deleting stuff from this folder.
- **PreferencePanes** Stores any additional System Preferences panes.
- **Preferences** Holds application-specific settings files as well as those for the entire system.

- **QuickTime** Contains built-in and third-party codecs and QuickTime plug-ins.
- **Screen Savers** Contains additional and third-party screen savers.
- **StartupItems** Just what it sounds like—but don't delete anything your Mac might need. Remember, if don't know what something is, don't throw it away.

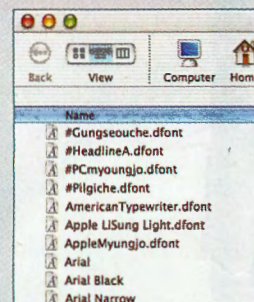
### 05 .dfont Blues

**PROBLEM:** I've got all these .dfont files in my OS X Fonts folders—but when I try to use them in OS 9, the font's not available. Why not?

**SOLUTION:** Ah...for this we need to dig deep into our memory banks and remember the old days of Mac OS 9. Are you with us? Good.

Remember that in Mac OS 9, all your fonts stored their data in the resource fork of the file (as opposed to the more-standard data fork). Well, Mac OS X stores its fonts in the data fork, hence the name *.dfont* (which stands for *data fork font*). Technically, you can't use these fonts natively in Mac OS 9. But as with most things in Mac OS X, where there's a will, there's the Terminal.

This hack requires that you have the Mac OS X Developer Tools installed. Once you do, head to the Terminal and type the following (pressing Return after every line):  
**cd /Library/Fonts** This changes you to the Fonts directory.  
**touch Baskerville** This creates a new font file for use in Mac OS 9.  
**cp Baskerville.dfont Baskerville/** (no space) **rsrc** This copies the data fork of OS X's Baskerville font to the resource fork of the OS 9 version.  
**/Developer/Tools/SetFile -t FFIL** (space) **-c DMOV Baskerville** This sets the type and creator and properly registers your new font as an OS 9 font.



Mac OS X stores fonts in .dfont files. But you can convert them for use in Mac OS 9 too!



# Finder Flubs

## 06 Changing Window Views

**PROBLEM:** How come my windows won't stay in Column view? I have to change them to Column view each time I open them. It's very frustrating!

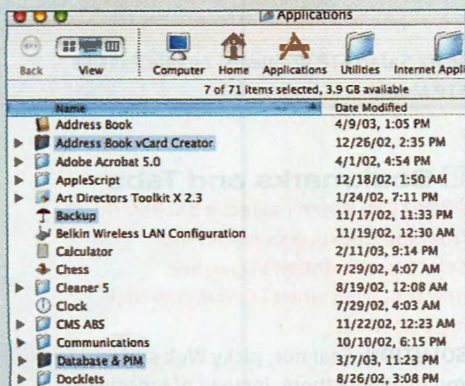
**SOLUTION:** The Finder needs definitive proof that you really want to change the default view (or location) of a folder. To give it the proof it needs, follow this quirky procedure: First open the folder. Then, *before you do anything else* (don't even scratch your nose if you've got an itch), change the window view, position, and size to how you want it to appear every time you open that folder. Immediately close the folder. Now you can scratch.

Bear in mind that if you open a folder via both the Dock and the desktop, you have to configure it twice—once for each way you access it.

## 07 Unresponsive Shift Select

**PROBLEM:** Whenever I'm in List or Column view, I can't select multiple files that are not next to each other the way I could in Mac OS 9. What a pain!

**SOLUTION:** Remember when Apple decided that Command-N should open a new Finder window rather than create a new folder in OS X? (No, we're not still bitter...) Anyway, this is the same deal. You can still select multiple



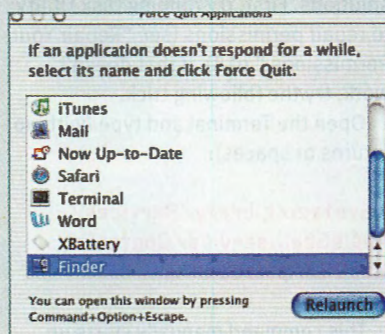
Yep, you can still select multiple files in OS X, but you've got to use the Command key to do it.

noncontiguous items, but you have to press Command instead of Shift when doing so.

## 08 Custom Icon Tango

**PROBLEM:** When I paste a custom icon over a default folder icon, the change appears immediately. But if I paste a custom icon over an existing custom icon, the icon doesn't change till I restart my Mac. Why the hassle?

**SOLUTION:** The Finder caches custom icons when it reads them from a given file or folder. As a result, it doesn't immediately recognize when you've replaced a custom icon with a new



Relaunch the Finder to see changes to your custom icons.

custom icon. However, you don't need to restart—instead, press Command-Option-Escape to bring up the Force Quit dialog. Click the Finder and click Relaunch—this forces the Finder to flush and reload its cache.

## 09 New Folder Nuisance

**PROBLEM:** Before I installed Jaguar, I was able to create a new folder by pressing Command-Shift-N and immediately typing a name for it. Now, any time I create a new folder in List view, it stays selected, but I can't edit its name right away. How annoying is that?

**SOLUTION:** Yes, this behavior did change with 10.2, but thankfully Apple was consistent with another aspect of the operating system—the fact that you can edit any selected item by pressing Return. So create your new folder from the keyboard, then press Return to edit its name.



# Mail Maladies

## 10 Slow Mail Compactor

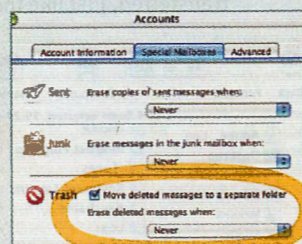
**PROBLEM:** Mail always seems to start compacting at the most inopportune times. What's it doing, why does it take so long, and is it OK for me to stop the process?



**SOLUTION:** Mail stores each mailbox as a separate directory (all contained within Users > user name > Library > Mail, for those who care). Within each mailbox directory is a handful of files, including the mailbox data itself, an index to that mailbox, a table of contents (for quicker screen-display operations), and a separate file containing messages recently added to that mailbox.

When you delete a message, Mail doesn't actually remove it from the mailbox. Rather, it adds a note to the table of contents and index that says, "This message doesn't need to be here anymore." When Mail compacts a mailbox, it cleans everything up, consolidating the new messages into the main mailbox file and deleting unnecessary items. Depending on the size of your mailbox (and how long it's been since Mail last compacted), that operation can take anywhere from seconds to minutes or more.

You can manually compact your mailboxes by



Control-clicking the in-box you want to compact in your Mail drawer and choosing Erase Deleted Messages from the contextual menu that appears. Or you can set the frequency of compacting by going to your Mail preferences, double-clicking your account, selecting the Special Mailboxes tab, and tweaking the setting under the Trash section.

One last note: Because Mail stores data in lots of small files, any



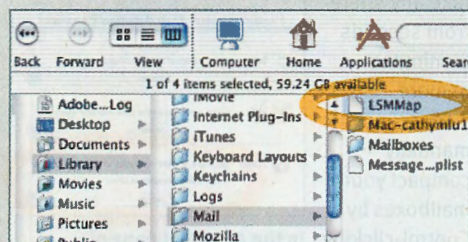
file-system corruption can potentially wreak havoc on your saved mail. It's always a good idea to run fsck (or other tasks related to file-system maintenance) on a regular basis. See "Run File-System Checks," next page.

## 11 Pass On Junk-Mail Training

**PROBLEM:** We just got a second Mac—for my husband—and I'd like to give him the benefit of my six months of training junk-mail filters (I'm a very giving wife). How can I do this?

**SOLUTION:** Transferring your six months of training is a 3-minute job. Apple stores everything your junk mail has learned in the LSMMMap file (Users > user name > Library > Mail).

1. Start up Mail on your husband's Mac and configure it for him as you normally would.
2. Go to the Mail menu, choose Junk Mail, and set it to Automatic. Quit Mail.
3. Copy the LSMMMap file from your computer to your husband's computer, putting it in the same folder on that system. Restart Mail. Voilà! Six months of junk-mail training transferred, just like that.



Move this file to a new Mac, and all your junk-mail training will move as well.

## 12 Get Your Drawers Straight!

**PROBLEM:** How come my drawer in Mail switches from left to right on a whim, without warning?

**SOLUTION:** Mail is just trying to be nice to you and read your mind by putting the drawer on whatever side of the screen has more real estate. If you move your main Mail window around, then Mail changes its mind

about where to put the drawer. Just be aware of where you're moving the Mail window, and if you get too close to one edge of the screen, expect that the drawer will open on the other side.

## 13 Regain Mail Composure

**PROBLEM:** Whenever I try to compose a new message, Mail just sits and spins, and nothing happens. Why the pause?

**SOLUTION:** This problem occurs when Mail is waiting for Mac OS X's built-in spelling checker to kick in and it never does. There are two possible solutions. First, try running Disk Utility to repair permissions (see "Repair Your Permissions," p18). If that doesn't work, try the following trick.

Open the Terminal and type (with no returns or spaces):

```
/System/Library/Services/  
AppleSpell.service/Contents/  
MacOS/AppleSpell &
```

This command manually starts up the built-in AppleSpell spell-checking service, which should then let you compose messages in Mail without a delay. Make sure to type the ampersand at the end, otherwise the service will quit when you close the Terminal. Unfortunately, the checker only stays on until you reboot—you then have to restart it again via the Terminal.

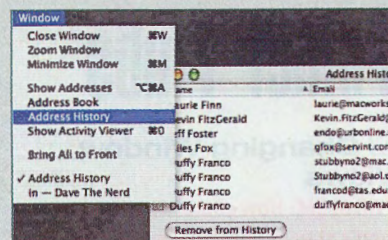
If neither of these solutions works, you can go into the Composing pane of Mail's preferences and disable Check Spelling As I Type—and buy a dictionary.

## 14 Autocomplete Woes

**PROBLEM:** Every time I type my friend's name in Mail's To line, her old email address pops up, even though I've updated her address in Address Book.

**SOLUTION:** You know that creepy friend who remembers everyone you've ever dated and everything you've ever said in your life? Mail's kinda like her.

Mail keeps a history of every address to which you have ever sent a message. When filling in To or CC fields, Mail looks at this address



Remove unwanted email addresses from Mail's Address History list.

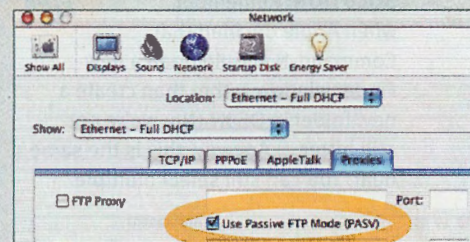
history as well as at Address Book. Thankfully, you can go to Window > Address History and remove addresses from this history list.

# Safari Snafus

## 15 FTP No More

**PROBLEM:** Ever since I upgraded to the latest version of Safari, I can't FTP anymore.

**SOLUTION:** Chances are you're behind a firewall or some sort of router that's blocking standard FTP traffic. This problem's easily solved, though. Go to the Network preferences pane, click the Proxies tab, and make sure Use Passive FTP Mode is checked. In general, this makes FTPing more compatible with firewalls and routers.



To fix Safari FTP problems, enable Passive FTP Mode.

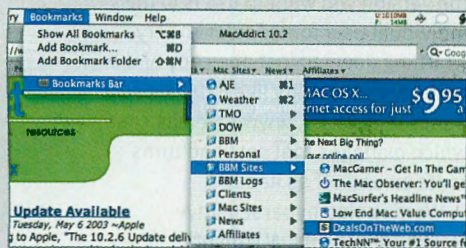
## 16 Bookmarks and Tabs

**PROBLEM:** When I select a bookmark from the Bookmarks menu, the selected site doesn't open in a new tab, even when I Command-click my selection.

**SOLUTION:** Fear not, picky Web surfer! You're almost there. Instead of pressing Command when you select the actual bookmark, press Command a bit



sooner—when clicking the Bookmarks menu. Now when you choose your bookmark, it'll open in a new tab.



Command-click the Bookmarks menu to get links to open in their own tab.

## 17 One-Click Safari Tabs

**PROBLEM:** I am just bonkers over Safari's tabs, but am sick of having to go through a contextual menu to make a new page open in a fresh tab. Is there another option?

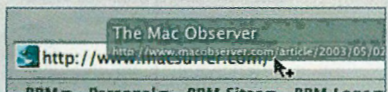
**SOLUTION:** Certainly, although you need a three-button mouse for this (or a two-button mouse with a clickable scroll wheel). Simply use the third button to click a link, and it should open in a new tab. Third-button support is built right into the OS—and they never told us!

Note: If you're using Microsoft's IntelliPoint software for your mouse or trackball, you have to map a button to activate a Command-click. If you don't have a free button or clickable scroll wheel, you can manually Command-click a link to open up a page in a new tab.

## 18 Open Window Madness

**PROBLEM:** When I click certain links, a new browser window opens. Ugh! How do I make it so that links open in the current window?

**SOLUTION:** Don't fret. Simply drag the link from the page up to the location bar, let go, and Safari will open the link in that window, no questions asked.



Drag links to the location bar so you can open them in the same window.

## + RUN FILE-SYSTEM CHECKS

Preventative Maintenance

While there are times when you need Norton Utilities or TechTool Pro, most folks can keep their file systems in check by using the built-in, time-honored fsck tool, which checks for and repairs damage within the file system.

1. Reboot your Mac.
2. Start up in single-user mode (hold down Command-S until you see text and other Unix-type mumbo jumbo).
3. When you see a command prompt, type `/sbin/fsck -y`. This command will run a series of tests, report any errors, and fix them. If it finds errors, rerun it until you no longer get any errors. Type `reboot` once everything checks out.

**HOW OFTEN:** At least once a month.

## iNfuriating iApps

### 19 Choppy Visuals, Dude

**PROBLEM:** I want to kick back and zone out to some iTunes with my visuals playing in full-screen mode. But my visuals aren't flowing as smoothly as I would like, and it's freakin' me out, man.

**SOLUTION:** Like the poor, tired MacAddict editors, your Mac is trying to do too much at once. Not only is it decoding and playing your MP3s (or AACs) in real time, but it's got to analyze them and create killer visuals in full screen. Here's a workaround:

1. Go to the Universal Access preferences. Under the Seeing tab, click the *huge* Turn On Zoom button, or press Command-Option-asterisk (\*).
2. Head back over to iTunes. In the Visualizer menu, first disable Full Screen, and then choose Small or Medium for the size of your visuals.



Choose a smaller window for Visualizer, and make it easier on your Mac.

3. Turn on the Visualizer, get your tunes cranking, and then use the zoom keyboard commands to fill your screen with smooth visuals—Command-Option-plus (+) and Command-Option-minus (-).

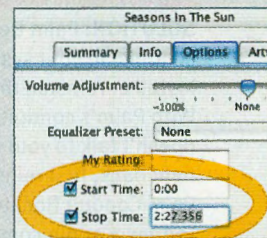


Start playing your tunes with the Visualizer set to a smaller size. Now you can start zooming.

### 20 Split Songs

**PROBLEM:** I ripped a Perry Como CD and the last track actually contains two songs—the normal song and a bonus song. How come iTunes won't play them as two separate songs? (I really can't take two Perry Como songs in a row.)

**SOLUTION:** In iTunes 3 and later, you can cut up songs by setting start and end times. Control-click the offending track, choose Get Info from the contextual menu, then go to the Options tab and choose a start and stop time. Next go to Advanced > Convert Selection To MP3 (or AAC, depending on your Preferences settings). iTunes will create a new song—leaving the old one untouched—based on your chosen start and stop



By setting start and stop times, you can create two different songs from one long track.



times. Do this procedure twice for your Perry Como track (once for each song), and then delete the original track. Your ears will thank you.

## 21 Gross iTunes Fonts

**PROBLEM:** After I installed iTunes 4, the font looked jaggy—not all smooth and silky as in iTunes 3.

**SOLUTION:** iTunes 4 does some strange things with font smoothing. One easy fix is to upgrade to Mac OS 10.2.6. Otherwise, go to the General System Preferences pane and set Turn Off Text Smoothing For Font Sizes to the 8 And Smaller option (9 is the default). Quit and relaunch iTunes, and you're good to go. At this point, you can even set font smoothing back to 9 and iTunes will behave properly.

## 22 iMovie's iDVD Problems

**PROBLEM:** Whenever I ask iMovie to launch iDVD 3, it refuses. All I get is that friggin' beach ball. I'm starting to hate the sight of beach balls—even real ones.

**SOLUTION:** Mac OS X is simply getting confused with which version of iDVD it's supposed to open. First delete every copy of iDVD from your drive (this includes any versions from Classic too). Second, reinstall iDVD from your install or iLife CD. Finally, run Apple's repair permissions (see "Repair Your Permissions," p18). That should solve your problem—and make you stop hating beach balls (for now).

## 23 Out-of-Sync iSync

**PROBLEM:** I updated Palm Desktop and now iSync doesn't work.

**SOLUTION:** Palm Desktop places its conduits in your system anytime you install or reinstall the Palm software. With Palm's conduits active, iSync doesn't talk to your PDA properly. To fight back, first reinstall the iSync Palm Conduit (located at the bottom of the [www.apple.com/isync/download](http://www.apple.com/isync/download) page). Next go to Library > Application Support > Palm HotSync > Conduits and delete the Address Conduit and Datebook Conduit (if they're already gone, that's OK). Now give iSync a try.

## 24 iPhoto Bloat

**PROBLEM:** I swear I've deleted hundreds of bad pictures from my iPhoto library, but the size of my iPhoto Library folder is still huge. I've emptied my Trash, but it doesn't help.

**SOLUTION:** Ah, yes. iPhoto's Trash is not the same as the Mac OS X Trash. Simply deleting a picture from iPhoto doesn't actually delete the associated files—you need to tell iPhoto specifically to empty its own Trash by going to iPhoto's File menu and choosing Empty Trash.



You need to tell iPhoto manually to empty its own Trash of deleted pictures.

# Misbehaving Microsoft Apps

## 25 Word Quits!

**PROBLEM:** Sometimes when I change fonts in Word, the app unexpectedly quits. What's the word on Word?

**SOLUTION:** Word unexpectedly quitting—well, it happens all the time—but it's especially common if you have a lot of fonts scattered throughout your system or you have multiple copies of the same font in different places. Mac OS X looks for fonts in the following order:

**Individual User Fonts Folder** (Users > user name > Library > Fonts)

**System-Wide Fonts Folder** (Library > Fonts)

**Network Fonts Folder** (Network > Library > Fonts)

**Mac OS X Fonts Folder** (System > Library > Fonts) Note: Do *not* edit, remove, change, or add fonts to this folder.

**Classic Fonts Folder** (System Folder > Fonts)

If you're having a problem with a specific font, check to see if it's living in multiple locales. If it is, make sure the version you want to use is in the individual user fonts folder and try whittling down to just one copy of the font—or use a utility like Extensis's Suitcase (\$99.95, [www.extensis.com](http://www.extensis.com)), which manages font sets and turns fonts on and off as needed.

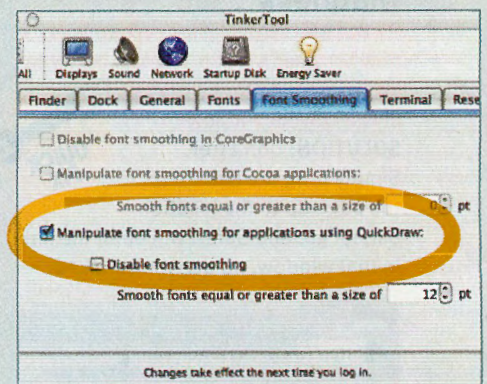
Word is also hypersensitive to corrupted fonts. Microsoft recommends running a font-fixing utility such as Morrison SoftDesign's FontDoctor X (\$69.99, <http://morrisonsoftdesign.com>) if font problems persist—it worked for us.

## 26 Internet Explorer Jaggies

**PROBLEM:** All of a sudden, antialiasing stopped working in Internet Explorer. I swear, I didn't touch a thing!

**SOLUTION:** Since it's a Carbon app, Internet Explorer can get flaky with its antialiasing. (A Carbon app is one that's not 100 percent OS X native and that relies on older components to ensure system compatibility.) The problem is more likely to creep in if you're running multiple Carbon applications at the same time, since they all use the same drawing routines—QuickDraw, for those of you keeping score at home.

To deal with QuickDraw font-smoothing problems, use Marcel Bresink's TinkerTool (free, [www.bresink.de/osx/TinkerTool2.html](http://www.bresink.de/osx/TinkerTool2.html)). Open up the TinkerTool system prefs, go to the Font



Use TinkerTool to manipulate font settings for Carbon applications.



Smoothing tab, and enable Manipulate Font Smoothing For Applications Using QuickDraw.

## 27 Word Text Scrunching

**PROBLEM:** Sometimes when I delete a word or two in Word, the entire paragraph compacts down into a line or two and the sentences end up on top of each other.

**SOLUTION:** Like the "Internet Explorer Jaggies" bug (#26), this problem relates to QuickDraw-rendering inaccuracies in Mac OS X (and makes us want to use a word processor that's built on a true Mac OS X foundation—but that's another story). What's happening is that the system isn't constantly rerendering the screen. While this supposedly saves processing time while you work, it also presents problems like this redraw issue. Sadly, the only fix for this bug is to scroll up or down to make your text display normally again.

## 28 Internet Explorer Amnesia

**PROBLEM:** How come Internet Explorer can't seem to remember the preferences I've set for it the next time I launch it? Doesn't it care how I feel?

**SOLUTION:** Don't take it personally—you're not the only one whom Internet Explorer ignores.

But before you start cursing out Explorer, realize that other apps may share the blame—namely, Entourage and URL Manager Pro (\$25, [www.url-manager.com](http://www.url-manager.com)). Like Explorer, these apps write to the main Mac OS X Internet configuration preferences (to geeks, that's the `com.apple.internetconfig.plist` file). If you launch, say, Entourage first, it will take over your Internet preferences file and not let Explorer write any changes to it. Here are a couple of workarounds:

1. Before launching any other apps, start up Internet Explorer, make the changes to your prefs, and then quit Explorer. That should save the changes to the prefs file.
2. Delete the `com.apple.internetconfig.plist` file (in Users > *user name* > Library > Preferences)—it may be corrupted.

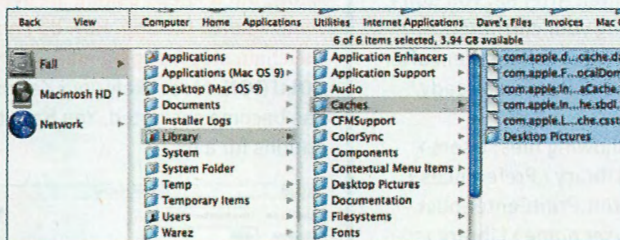
## Preventative Maintenance

## CLEAN YOUR CACHES

Mac OS X stores a lot of commonly accessed data (like Finder icons and Extensions data) in its caches to optimize performance. But sometimes the data in these caches does not get updated properly. Here's the fix:

1. Delete everything in Library > Caches.
2. Delete everything in Users > *user name* > Library > Caches (if you want to leave your Internet caches intact, don't delete the Safari or MS Internet Cache folders).
3. Reboot.

**HOW OFTEN:** Once a month, and before any OS update.



Clear out your Caches folders to clean out some of the sludge that accumulates in Mac OS X.

## Network and Printer Woes

### 29 Sharing Drives

**PROBLEM:** Can I share my entire drive with a guest user as I could in OS 9?

**SOLUTION:** While you can't share your drive with a guest, you *can* share your entire drive with anyone to whom you have granted admin access on your Mac. See "Create a New User," p27, to find out how to set up an admin. If you turn on File Sharing (via the Sharing preferences pane), any admin can automatically see all attached disks when connecting to your Mac.

### 30 Network-Printer Problems

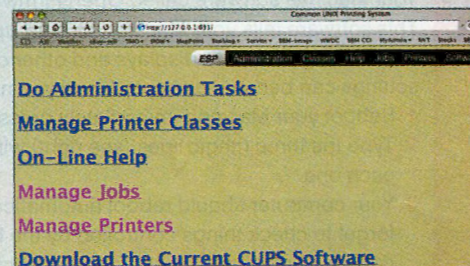
**PROBLEM:** I tried printing a document to a network printer, and it didn't print. To add insult to injury, now I can't delete the document from Print Center!

**SOLUTION:** Print Center (like most Mac OS X utilities) is merely a pretty interface to an underlying Unix-based engine that manages your printers. Sometimes the hooks between these utilities (Print Center, in this

case) and the Unix gobbledgeek don't work quite right. This is one of those situations.

Thankfully, there's an alternative to digging into Unix. Mac OS 10.2 uses an open-source engine called CUPS (that's common Unix printing system, for acronym-philies) to manage its printers. The coolest part is that CUPS provides its own interface, which you can access from your favorite Web browser.

1. Open a Web browser and go to <http://127.0.0.1:631>—the :631 tells the Web browser which port it should connect to. Note that this process is connecting to your local machine (127.0.0.1 is another name for This Very Mac), so you don't have to be connected to the Internet to do this.
2. Click the Manage Jobs link.
3. Find the offending print job and click Cancel Job.



You can use a Web browser to manage your printers and jobs.



### 31 Stuck Printer

**PROBLEM:** Sometimes I can't print until I delete my printer profile from Print Center and then add it again. It's so annoying!

**SOLUTION:** This problem is often an indication that your printing preferences are corrupted. The easiest thing to do is to delete them, restart, and let Mac OS X rebuild them from scratch.

1. Quit Print Center. After all, you don't want it caching your corrupted preferences and rewriting them after you delete them. But you already knew that.

2. Delete the following files: Users > *user name* > Library > Preferences > com.apple.print.PrintCenter.plist and Users > *user name* > Library > Preferences > ByHost > com.apple.print.PrintCenter.whatever.plist. Note that *whatever* is different with each system, so just delete any of these PrintCenter files that you find in the ByHost folder.

3. You'll also want to delete these files: etc > cups > printers.conf and etc > cups > printers.conf.0. A warning for Unix-phobes: You might need to open the Terminal to delete these files, since you may not see the *etc* folder in the Finder. To remove these files, type `sudo rm /etc/` (no space) `cups/printers.conf`, press Return, then type `sudo rm /etc/` (no space) `cups/printers.conf.0`. Depending on how your printers are configured, one or more of these files might not exist. If your Mac says there's no such file, don't sweat it.

4. Now restart your Mac and add your printers again.

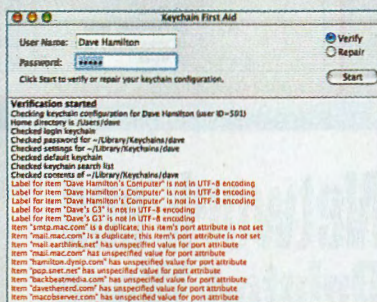


## Security Breaches

### 32 Stop Keychain!

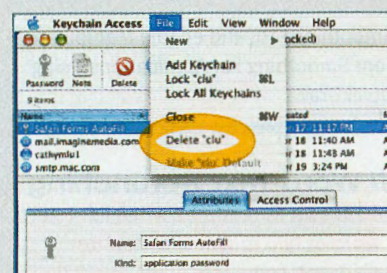
**PROBLEM:** Mail keeps asking for permission to decrypt items in my keychain—I always select Always Allow, but it keeps asking me every time I launch the app. How do I make Keychain stop bugging me?

**SOLUTION:** Most likely your Keychain has become corrupted. You have two options for a fix.



Use Apple's Keychain First Aid to look for and fix problems with your Keychain.

1. Run Apple's Keychain First Aid utility (available at <http://docs.info.apple.com/article.html?artnum=107234>). It has two modes: Verify and Repair. Run Verify first, and if it finds problems, tell it to repair them.
2. If the above solution doesn't work, then Keychain is corrupted beyond repair and you need to erase it. Starting over with a new Keychain is about as fun as getting a cavity filled, but sometimes it's the only



If Keychain First Aid fails, you need to delete your existing Keychain and start anew. Bummer.

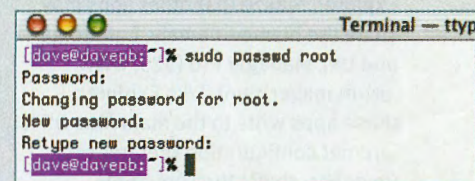
option. Go to Applications > Utilities and run Keychain Access. From the File menu, choose Delete to start over with a fresh Keychain file.

### 33 Lost Roots

**PROBLEM:** Shoot. I created my root password years ago, and I've forgotten it since. What do I do?

**SOLUTION:** Either take some memory-enhancing Ginkgo Bilboa, or follow these simple steps.

1. Log in as an admin user—hopefully you remember *that* password.
2. Open up the Terminal and type `sudo passwd root`.
3. The Terminal will ask you for a password—type your admin password (not root, which would be impossible anyway since you don't remember it).
4. The Terminal now asks you to type the new root password twice (and for Pete's sake, write it down this time).



You can change the root password from the Terminal.

### 34 Getting to the Root

**PROBLEM:** I need to run a program as root to edit a system-owned text file, but I don't want to log out and log back in as root. How can I do this?

**SOLUTION:** Well, there are two ways: the pretty way and the ugly way. The pretty way involves using Brian Hill's Pseudo (\$15, <http://personalpages>

## RESET YOUR NVRAM

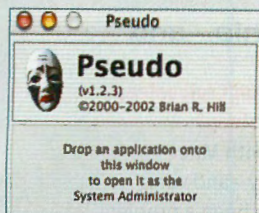
Your Mac has software called Open Firmware built right into the motherboard. This software tells your Mac how to start up and saves various settings about how the Mac should talk to displays and other critical components. Sometimes these settings can become corrupted, and you need to reset them.

1. Reboot your Mac and immediately press Command-Option-O-F.
2. Type the three magic lines (see right) with a Return after each one.
3. Your computer should reboot automatically. And don't forget to check things controlled by the PRAM, such as date and time, just to make sure everything's hunky-dory.

**HOW OFTEN:** Only when your Mac is acting funky. If it ain't broke, don't fix it.

```
reset-nvram
set-defaults
reset-all
```





#### Use Pseudo to run applications as root.

type in this Terminal command, which tells the computer to run TextEdit as root: **sudo open -a TextEdit**. As always, when working as root, be careful. Don't do anything we wouldn't do.

#### more on... root

Mac OS X, like all versions of Unix, has an all-powerful user at its core, named **root**. By default, this user is disabled in Mac OS X, and that's a good thing. If everyone were to log in to their Mac as root, well, let's just say we'd be writing more articles along the lines of "50 Biggest Disasters Your Kids and Their Buddies Inflicted upon Your Mac While You Were Outside Gardening."

Still, there are times when you want to be root. Typing **sudo** before any Unix command in the Terminal gives you root privileges. To enable root outside the Terminal, open the NetInfo Manager utility, click the lock to make changes, then go to Security > Enable Root User. Once enabled, you can choose to log in as root and have free reign over your system. If permissions get mucked up, for instance, root allows you to edit all your files and (hopefully) fix things.

#### 35 Kill Deleted Users

**PROBLEM:** How can I get rid of a deleted user's home folder? I tried dragging it to the Trash, but to no avail.

**SOLUTION:** Despite the fact that you deleted the user, your Mac remembers that the folder *used* to belong to someone else, and therefore won't let you touch it—not without a little force, anyway. Fire up the Terminal and type the following, replacing *user name* with the user's actual name: **sudo rm (space) -R /Users/'user name deleted'** (provided the folder shows up in Users as *user name deleted*).



## Hardheaded Hardware

### 36 Dejected Eject

**PROBLEM:** I have a third-party keyboard and one of those new Macs that doesn't have a CD-eject key on the front of the computer. I know F12 is supposed to eject the CD tray, but it doesn't. How do I eject?

**SOLUTION:** First, let us tell you about a few subtleties involving the Eject or F12 key (newer Apple keyboards have a dedicated Eject key; older ones assign the job to F12). For one thing, in recent versions of Mac OS X, you need to press and hold the Eject key to make it work. Apple did this to help out clumsy users (or typists with really long fingers) who were accidentally hitting Eject. Second, on some systems—especially those with external FireWire CD/DVD burners attached—you need to hold down Option-Eject. Don't ask us why. We didn't make the OS!

Failing all of the above, add Jaguar's Eject menu-bar item. Navigate to System > Library > CoreServices > Menu Extras and drag the Eject.menu folder to your menu bar. Easy, eh?



Add Eject to the menu bar to control your CD tray from the OS.

If you're really stuck, there are two almost-foolproof ways to eject a recalcitrant CD, but both require restarting:

1. Simply restart while holding down the mouse button—the CD should pop right out early in the startup process.
2. If that doesn't work, you can eject from Open Firmware, the operating system built into your motherboard that tells your Mac how to start up. Immediately upon starting up, press and hold Command-Option-O-F.



At the Open Firmware prompt, type **eject cd** to pop open the CD tray.

#### more on... the Eject key

Here are a few Eject-key tricks (unfortunately, some third-party keyboards don't support these combos):

- **Control-Eject** Brings up the Restart, Sleep, Cancel, Shut Down dialog.
- **Command-Control-Eject** Restarts your Mac.
- **Command-Option-Eject** Puts your Mac to sleep.
- **Command-Control-Option-Eject** Shuts down your Mac.

### 37 Determined Disk

**PROBLEM:** Sometimes when I drag my FireWire disk to the Trash, it tells me the disk is in use. But I swear I'm not using it.

**SOLUTION:** Chances are you have an application open that was using a file on that disk at some point and is still holding temporary items open on your FireWire drive. Just quit the offending app to finish dismounting your drive. If that doesn't work, you've got bigger problems—and reformatting the drive may be the only solution. Sorry.

### 38 Disk Pause

**PROBLEM:** Sometimes when I'm navigating through nested folders in the Finder, my Mac will pause and spin up my FireWire drive before continuing—even though I'm not trying to access that drive. It's very annoying and really slows down the Finder.

**SOLUTION:** Your Mac spins down your FireWire drive when it's not in use (to save power and presumably drive life). However, when you navigate the Finder, the system begins looking for extra icons and applications to associate with your files. During this process, the system looks at all available drives, including your FireWire drive.

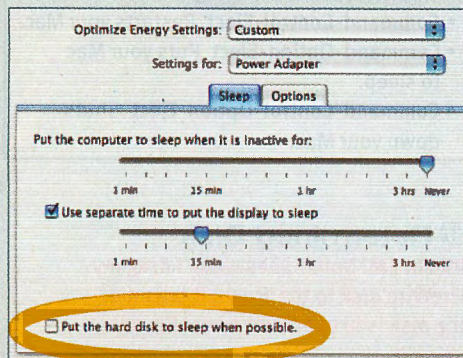
You have three options to cure this annoying behavior:

1. Unmount your FireWire drive when you're not using it. Obvious, but worth mentioning.



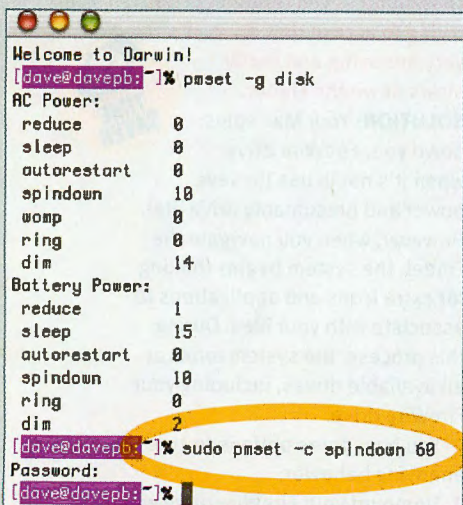


2. Go into the Energy Saver preferences pane and uncheck Put The Hard Disk To Sleep When Possible. Note, however, that this affects *all* your hard drives, including the boot drive. Laptop users may not want to do this, as spinning down the drive saves precious battery power.



You can use Energy Saver to fully caffeinate your drives.

3. If you don't want to disable spin-down completely, you can change the amount of time before the system spins the drives down (by default, this happens after 10 minutes of inactivity). To do this, you need—what else—the Terminal. Type `sudo pmset -c spindown 60` to set the hard drive spin-down to 60 minutes on AC power. PowerBook users: This will *not* affect the spin-down when you're on battery power (to do that, change the `-c` to `-b`).



The `pmset` command gives you finer control over your Mac's power-management settings.

### 39 Bleary-Eyed Mac

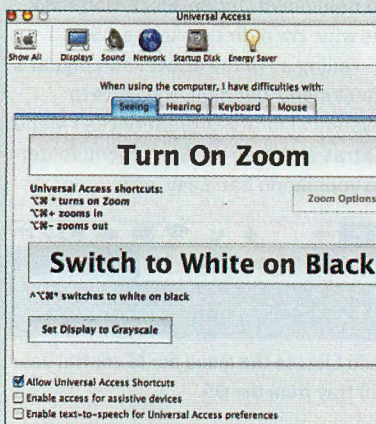
**PROBLEM:** When I wake up my G4 Mac, I get a screen full of squiggly lines and bars that run across the top and left side. Help!

**SOLUTION:** Starting with 10.2.5, some Macs don't properly set the resolution when waking from sleep. This problem affects users who had their displays set to nondefault resolutions when installing OS updates. The fix: Go to the Displays preference pane, change the resolution to something else (it doesn't matter what), restart, then change the resolution back to the way you prefer it.

### 40 Negative Screen Experience

**PROBLEM:** All of a sudden, and for no good reason, my screen looks like a film negative. All I get is white text on black! I can't take it anymore!

**SOLUTION:** Ah yes, you've inadvertently stumbled into the land of Universal Access and its various (aka insidious) ways of turning itself on behind your back.



Use the Universal Access prefs to toggle foreground and background colors.

If you open up the Universal Access preference pane, you'll see a big, huge box that says Switch To Black On White (or vice versa, depending on your current setting). Click this to restore normalcy. You probably turned on these settings accidentally by pressing the enabling key combination, Command-Option-Control-asterisk (\*). That, or someone's messing with your mind.

### 41 Mac Insomnia—and Narcolepsy

**PROBLEM:** My Mac won't fall asleep and/or wake up from sleep!

**SOLUTION:** Starting with Mac OS 10.2.4, very sleepy—and very unsleepy—Macs have been a problem. Some machines refuse to go to sleep (party animals), some machines refuse to wake up (lazy suckers). This often happens in machines with third-party PCI cards installed, but it has also been known to happen on stock machines.

The fix? Reset the machine's NVRAM (nonvolatile random access memory)—the settings that persist even after you turn off your Mac. See "Reset Your NVRAM," p24, to find out how to do this. Oh, and if you're having sleep issues yourself, try sipping some scotch before you go to bed (we like The Macallan).

### 42 Dead Mac Extraction

**PROBLEM:** My Mac won't start up and I'm on a deadline (I know, I know—I should have finished that report last week). I don't have time to troubleshoot right now. Is there any way to grab my data off my dead Mac?

**SOLUTION:** Assuming you can get the Mac to at least power up, you can start up your Mac in FireWire Target Disk mode. This turns your dead Mac into a very expensive FireWire disk. To do this, press and hold the T key immediately upon powering up your Mac. Within a few seconds, you should see a large floating FireWire icon. Plug this Mac into a healthy Mac via FireWire, and grab all the files you need.



To perform a quick data exchange, start up your dead Mac in FireWire Target Disk mode.



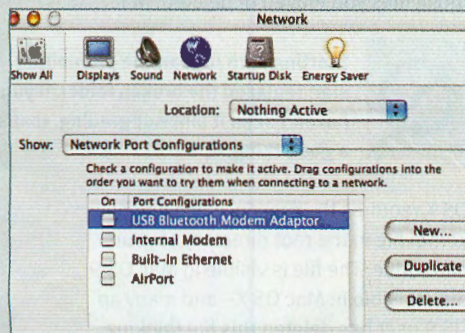
# Petulant Portables

## 43 Conserve Energy

**PROBLEM:** I was on a cross-continental flight enjoying my *Gladiator* DVD. Just as I got to the final showdown between Maximus and Commodus, my laptop battery pooped out. What a buzzkill! Is there a way to limit the power my laptop consumes when I'm just watching a DVD?

**SOLUTION:** While you probably can't watch the entire extended edition of *Lord of the Rings* on battery power, you can tweak your system to conserve every bit of energy.

Disabling unused networking components, especially AirPort and



By disabling all networking ports on your laptop, you can squeeze a few more minutes out of your battery.

Bluetooth, can regain precious lost minutes of battery life. Just go to the Network preferences and create a new location (from the Location drop-down menu). Name it something like *Nothing Active*. From the Show pop-up menu, choose Network Port Configurations. Once here, uncheck every box and click Apply Now. You now have a battery-saving profile that you can select via either the Network system preferences or Apple menu > Location.

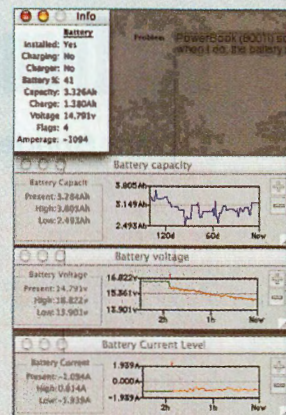
## 44 Battery Confusion

**PROBLEM:** My 800MHz TiBook tells me I'm on reserve battery power. I rush to plug it in since I don't want to lose that amazing haiku I've been writing. But when I do, the battery display tells me I've got a full charge. To add insult to injury, now I've lost my train of thought and can't finish my haiku.

**SOLUTION:** While we can't help you with the last line of your haiku, we can help you with your battery problem.

Most likely, your Lilon battery's memory is getting confused. In our experience, if you connect a PowerBook to its power supply for a month or more, it tends to get confused when you put it on battery power. The fix is easy: Let the battery completely discharge, down to nothing (aka keep on working until your 'Book dies), then plug your PowerBook back in and let it charge all the way back up. Now repeat that entire process.

You can monitor the capacity reported by your battery with Jeremy Kezer's XBattery (\$15, [www.kezer.net/xbattery.html](http://www.kezer.net/xbattery.html)). Keep XBattery open to track your battery's capacity over time—if you notice a significant dip in capacity, you should recalibrate the battery.



Use XBattery to monitor your battery's capacity.

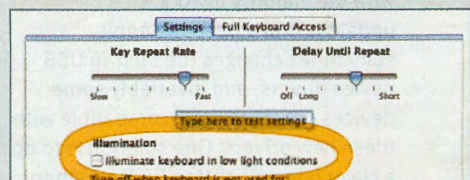
## 45 Dim PowerBook

**PROBLEM:** Sometimes while I'm typing on my 17-inch PowerBook, the screen appears to dim for no reason, then it returns to normal. What's going on?

**SOLUTION:** If you're lucky enough to have a 17-inch PowerBook, we don't want to hear any complaints. None. Next!

OK, fine, we'll help you out. The 17-inch PowerBook has a built-in ambient light sensor that by default adjusts the screen brightness and keyboard backlight if it detects a change in the brightness levels of its surroundings. These sensors are installed underneath the speaker grilles, and some folks accidentally trigger the sensors by covering the grille(s) with their hands.

If your wandering hand becomes a huge problem, you can disable the light sensor's defaults in the Displays preferences. Uncheck Automatically Adjust Brightness As Ambient Light Changes to disable the screen dimming and undimming. If you want to disable keyboard illumination as well, go to the Keyboard pane and uncheck Illuminate Keyboard In Low Light Conditions.



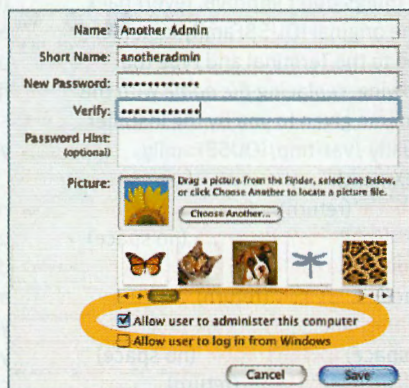
If you can't take the light-up keyboard, disable it. But then why'd you buy this PowerBook?

## + CREATE A NEW USER

Sometimes your user preference files can become corrupted and prevent you from logging in to fix the problem. Having a backup admin user allows you to solve these types of problems easily without having to revert to more drastic measures.

Adding a second user is a cinch—just navigate to the Accounts preferences pane and select New User. Make sure you enable Allow User To Administer This Computer for this user.

**HOW OFTEN:** Once—when you first buy your machine, or as soon as you finish reading this article, whichever comes first.



Add a second user with administrative rights to assist you with troubleshooting.



# Big Trouble

## 46 Dark Shade of Death

**PROBLEM:** I was innocently using my Mac when a dark, drapelike shade appeared. It looked like someone had slowly lowered tinted glass over my screen. Then a dialog with text in many languages appeared, telling me to restart. It's the weirdest thing I've seen since that chick kissed all those guys in latex masks on *Mr. Personality*.

**SOLUTION:** Your machine suffered from that Mac OS X phenomenon known as a kernel panic. Depending on your version of Mac OS X, a kernel panic will appear as either a tinted shade (like the problem described above) or, even more disconcerting, a series of white-on-black error messages littering your screen. Either way, the problem is the same: Your Mac tried to do something and ran into a brick wall. The only option is to restart (which will likely take longer than usual as your Mac performs some file-system checks).

If this problem becomes chronic, you can try to diagnose the cause of the panic by holding down the Shift key while restarting—this keeps all kernel extensions from loading. Try re-creating the steps that led to the error. If your Mac doesn't crash with kernel extensions off, you can be pretty sure your problems are related to a recently installed driver. Try to get an updated driver from the device's manufacturer (or check [www.versiontracker.com](http://www.versiontracker.com)).

## 47 Jaguar Kernel Panics

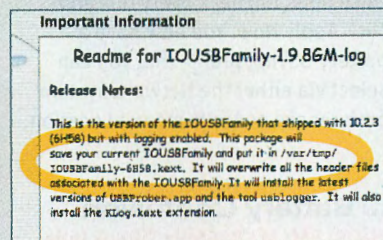
**PROBLEM:** In Jaguar, I get kernel panics all the time. And that's making me panic, colonel!

**SOLUTION:** Kernel panics have been a chronic problem with the majority of 10.2.x updates. That's because Apple sometimes changes the built-in USB device drivers, and invariably some devices out there are incompatible with these new drivers. One solution is to do a clean reinstall of Mac OS X and then update to the version prior to the one that presented the problem. OK, we're



```
Terminal -- ttty4 -- %4
[dave@davepb:~]% sudo -s
Password:
[root@davepb:~]# mv /System/Library/Extensions/IOUSBFamily.kext ~/.Trash
[root@davepb:~]# mv /var/tmp/IOUSBFamily-6H5B.kext /System/Library/Extensions/IOUSBFamily.kext
[root@davepb:~]# touch /System/Library/Extensions
[root@davepb:~]#
```

Move your saved IOUSBFamily extension back into place if things don't get better.



Take note of the .kext file name and location where the installer will save your current IOUSBFamily extension.

sure you didn't want to hear that.

But before you do that, try reverting the USB drivers' kernel extension back to an older version. The file you need to replace is IOUSBFamily.kext (in System > Library > Extensions). Download the version of that file for the OS prior to the one you just installed—you can get the file from <http://developer.apple.com/hardware/usb/usb bloggers.htm>.

Once you download the file, install the package. Now, you know the readme screen—that thing you never read during an installation? Well, read it this time, because you'll want to write down where your Mac is saving the current version of your USB driver (necessary if you want to revert back to the original). Once you're done installing, restart your Mac, then cross your fingers and test your problematic USB devices.

If things don't improve, revert back to the original IOUSBFamily.kext file. Head to the Terminal and type the following, replacing *file name* with the file name given to you by the installer (usually /var/tmp/IOUSBFamily-XXXX.kext):

```
sudo -s (return)
mv /System/Library/ (no space)
Extensions/IOUSBFamily.kext
(space) ~/.Trash (return)
mv file name /System/Library/
(no space) Extensions/ (no space)
IOUSBFamily.kext (return)
touch /System/Library/ (no
space) Extensions
```

Reboot your Mac again.

## 48 Prohibitive Signs

**PROBLEM:** When I start up, all I get is a circle with a slash through it.

**SOLUTION:** This means your Mac, despite all its best efforts, can't start up. Before you panic and run screaming through the streets, calm down. Think. Breathe.

Now ask yourself a few questions. Did you change anything the last time you ran your Mac? Delete any files you didn't recognize? If so, try booting from a Mac OS 9 CD (if your Mac supports it), a Mac OS X boot CD (if you made one), or a bootable FireWire drive and replacing those files you moved or deleted. Mac



Starting with Jaguar, the prohibitive sign replaced the broken folder. If you haven't seen it since upgrading, that's a good thing.

OS X requires the presence of a mach\_ kernel file in the root directory of your hard drive. The file is visible in Mac OS 9 but invisible in Mac OS X—and many an OS 9 user has deleted this file thinking it wasn't important. If the mach\_ kernel file is gone, try copying it from another bootable disk or CD.

If you swear that you didn't move anything, boot from a Norton Utilities ([www.symantec.com](http://www.symantec.com)), TechTool Pro ([www.micromat.com](http://www.micromat.com)), or Mac OS X CD and run a disk utility to try to fix any problems on the drive. Occasionally file-system corruption can affect startup files, so fixing that may solve your problem.

If nothing's working, you're in for a reinstall of Mac OS X. Chances are your user folders don't have any damaged data, so you should be able to save most (or possibly all) of the settings you'd previously configured for yourself. When the installer asks you to choose your destination volume, click the Options button. Select Archive And Install, and then check the Preserve Users And Network Settings box.



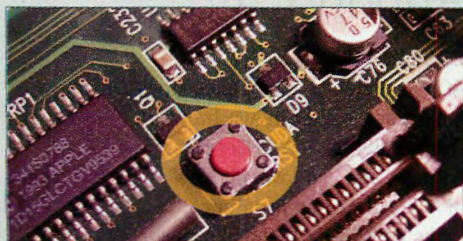
## 49 Very Dead Mac

**PROBLEM:** My Mac's dead. It won't start up. Am I in big trouble?

**SOLUTION:** A Mac that won't start up isn't always a horrible sign. Of course, it's not always a good sign, either.

First check all of your cables and connections and make sure your Mac and monitor are plugged in. Next unplug *every* external device (yes, including your keyboards and mice), and try to start up using the power button on your Mac. Oftentimes something in the USB chain is getting in the way of the startup signal.

Didn't work? Try resetting the Power Manager (on laptops) or pressing the Cuda/PMU (power management unit) reset button on your motherboard. Since every machine is a bit different, check your users' manual for instructions (you still have that, right?). The reset button in desktops is usually a small red or black button on the motherboard. Press it once and see what happens. If there's more than one button on your motherboard, press 'em both. Heck, you ain't gonna make things any worse! Just don't try cleaning it with hot, soapy water, OK?



Press the magic button to try to revive a dead Mac.

Still didn't work? Try replacing the motherboard's PRAM battery. You can usually get one from Radio Shack or an authorized Apple repair center.

If that doesn't work, bring your poor Mac into your favorite Apple store or repair shop and show the guys what's going on (or rather, what's *not* going on). Alternatively, you can call Apple and see if the company has any magic solutions to share with you, or check Sherlock's AppleCare channel for advice. Oh, that's right, your Mac's dead—forget that Sherlock advice.

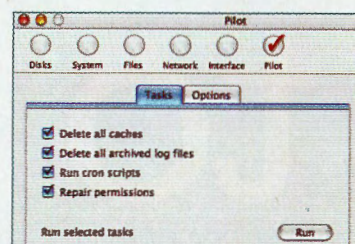
## Preventative Maintenance

## HAVE A COCKTAIL

We don't literally mean that you should have a White Russian, Manhattan, or Sex on the Beach—although we find all three quite useful in their own way. We actually mean you should check out Dicom's versatile donationware Cocktail (<http://www2.dicom.se/cocktail/index.html>), a self-described "free general purpose utility for Mac OS X 10.2 or later."

This app will clean your caches, repair your permissions, run scheduled system maintenance, delete locked or inaccessible files, clear out old logs, and more. There's nothing in this app that you can't do from the command line, but...well, why go there when you can do it with Cocktail?

**HOW OFTEN:** Once a month.



Use Cocktail to keep your system in tune the easy way.

## 50 Login Freeze Out

**PROBLEM:** Every time I try to log into my Mac, it either reboots automatically or just gives me the spinning beachball. Why is my own Mac shutting me out?

**SOLUTION:** There's two possible reasons your Mac's not showing you any love; Either you've got something in your login items that's not up to snuff, or you've got a damaged preferences file. Here are a few solutions:

1. Log in as your backup admin user and move your user's Preferences folder someplace safe—it's at Users > user name > Library > Preferences). Your Mac will re-create the Preferences folder the next time you log in—if the problem was a damaged preference file (say, your login items file, which resides in your Preferences folder), the Mac should now let you in.

What? You haven't created a backup admin user? OK, well, put a sticky note on your forehead to do that the moment your Mac is back in working order—and then check out "Create a New User," p27, for some help with this.

2. Remove your Preferences folder the good ol'-fashioned way: via the command line. Reboot your Mac and hold down Command-S. This will boot the system in single-user mode, which gives you root access

to the command line. First run a file-system check to make sure everything on your system is kosher (see "Run File-System Checks," p21). Once you're done, type the following lines, pressing Return after each:

**/sbin/mount -uw** / This allows you to make changes to the file system.

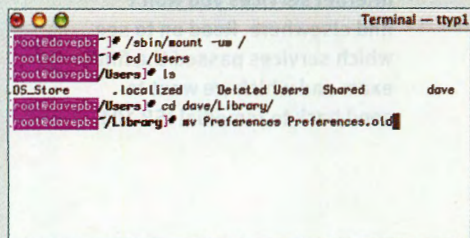
**cd /Users** This takes you to the Users directory.

**ls** This brings up a list of all the folders in the Users directory. Find the folder that corresponds to the user who's giving you trouble.

**cd user name/Library/** Substitute your own user name for *user name*, of course. That should get you to the right directory to edit your Preferences folder.

**mv Preferences Preferences.old** This renames your Preferences folder and gets it out of the way (of course, all of your preferences will revert back to their defaults).

**reboot** Finally, reboot your Mac.



Start up in single-user mode and move your Preferences folder out of the way to eliminate login errors.



Dave Hamilton, president of The Mac Observer, has been chased by bugs all his life and was happy to finally be the one doing the chasing.



# ISPs Put to the Test

We take the top national Mac-based Internet services to school. Which ones make the grade? And which ones are out to lunch?

If you want access to email, the Internet, and your own sliver of Web space—and who doesn't?—you have a choice of hundreds of ISPs (Internet service providers). Picking the right one depends on who you are and what you're looking for.

To help you make the right choice, we put five major national services to the test: America Online (AOL), EarthLink, Microsoft Network (MSN), Juno, and Apple's own .Mac. Some, like EarthLink and Juno, are just in the business of getting you up surfin' and emailin'. Others, such as AOL and MSN, encapsulate the whole Internet experience, while .Mac provides a bevy of Internet services you won't find elsewhere. Read on to see which services passed the final exam and which we want to send back to remedial ISP 101.

by Robert Capps  
photography by Mark Madeo

## AOL for OS X

URL: [www.aol.com](http://www.aol.com)

**Price:** \$23.90 per month for dial-up service; \$14.95 per month for Bring Your Own Access broadband service (\$9.95 per month when upgrading from dial-up)

**System Requirements:** Mac OS X (OS 8 or 9 users use AOL for Macintosh version 5, which offers some different features from the version reviewed here)



AOL is an immersive online service, offering a complete interface, its own Web browser and email client, and 21 channels of custom content (usually in conjunction with partners like WebMD and AutoTrader). Sign up with AOL and you get to hang out in its now-legendary chat rooms and use tools such as its calendar and messenger client.

For broadband users, AOL has introduced a new option called Bring Your Own Access—set up your own

DSL, cable, or other high-speed Internet connection and run AOL's software on top of that. This has allowed AOL to add a slew of bit-intensive features such as streaming-music radio stations and video news feeds. Unfortunately, many of these extras do not yet work on the Mac.

## Report Card:

### Interface

AOL's interface encompasses the AOL mail client, a special AOL browser (based on the Mozilla Gecko browser engine), and windows for viewing each of AOL's 21 custom content channels.

**Nelly:** **F** "Why did you make me install this ugly piece of crap on my computer?"

**Fred:** **C-** "It's so cluttered and complicated. It's not clear when I'm on the Web and when I'm seeing AOL's filtered content."

The main AOL screen offers a dizzying array of content and corporate synergies.





## Core Competencies

Our testers rated each major Mac Internet service in eight key categories, some fairly obvious, some a little more nuanced. Here's the breakdown:

<b>Interface</b>	How well is the overall interface designed in terms of both aesthetics and intuitiveness?
<b>Usability</b>	How functional and easy to use is the service? Does it make it clear how to access various features, or does it leave users confused?
<b>Web</b>	How do the Web components of the service stand up? Does it offer Web space for making a home page? Does it offer links to content on the Web? Is the integrated browser (if applicable) any good?
<b>Email</b>	What email services does it offer? Some Internet services offer a Web-based email option, while others come with their own full mail client.
<b>Extras</b>	What extra features are available? For example, some services have exclusive content such as news and entertainment channels, and others offer easy-to-use Web-based site builders.
<b>Multiple Users</b>	How well does this service suit a family? Does it provide multiple accounts, and if so, how easy is it to switch between them? Does it offer parental controls?
<b>Value</b>	Is this service worth the money?
<b>Overall</b>	What's the bottom line?

### Usability

AOL offers a single interface from which you access everything. This means menus everywhere, plus some features that you access from content windows or the integrated Web browser.

**Nelly: F** "In this day and age, any major service that gets overloaded and asks me to try again later just plain sucks."

**Fred: C-** "I like the channels, but all these different windows get confusing. Plus the service seems to lock up a lot."

### Web

AOL comes with its own specially designed browser, and offers 20MB of personal Web space per screen name for your own Web site.

**Nelly: F** "I like the 20MB of Web space, but don't even get me started on the crappy AOL browser."

**Fred: C-** "Wait, how do I know when I'm on the Web? And where do I go to figure out how to use the personal Web space? It's not clear."

### Email

AOL includes a built-in mail client. You can also access your mail from another computer via the AOL Web site.

**Nelly: F** "Spam already? I just installed the %\$#@! thing! And how about support for multiple POP accounts, advanced filtering, and preview panes—is AOL living in the 1990s?"

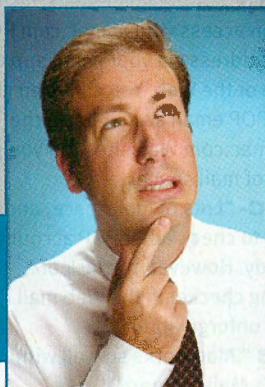
**Fred: C-** "Too many unwanted ads, and I can't see my new and old email at the

## Meet Our Testers

To make sure we could provide advice that fits your particular level of Mac addiction, we drafted two testers from opposite ends of the tech-savvy spectrum. We'll call the proud propellerhead Nerdy Nelly, and the enthusiastic Switcher First-Time Fred.

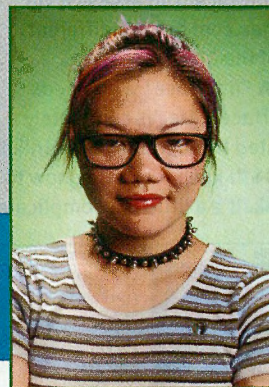
### First-Time Fred

"I don't care how my beautiful new Mac works, as long as it does what I want it to do easily and with no muss or fuss."



### Nerdy Nelly

"I know my POP from my IMAP and why WebDAV and SOAP are important, and I hate having my options limited."



same time. Plus, all the good screen names are taken: I can't believe I have to be *firsttimefred584*."

### Extras

AOL offers tons of extras, including custom content, a digital-photo service for sharing pictures online or ordering prints, calendar software, and chat rooms galore.

**Nelly: F** "Yawn..."

**Fred: B+** "Cool chat rooms and handy calendar. Plus I can share photos with my friends through the new You've Got Pictures center—if I ever buy a digital camera."

### Multiple Users

You can create up to seven accounts, each with its own screen name, password, and custom-set access level.

**Nelly: A** "It works. Can't knock that."

**Fred: A** "Each member of my family can have an account, and changing back and forth is so simple. I like having the ability to control Frieda and Freddy Jr.'s access."

### Value

You can pay \$24 per month for dial-up access or bring your own broadband.

**Nelly: F** "So I pay \$50 a month for DSL and then another \$15 for AOL. What kind of a chump do you think I am?"

**Fred: D** "It costs more than most dial-up services, yet it's more confusing. Not good."

### Overall

The primary benefit of AOL is (supposedly) convenience—it puts everything together in one (supposedly) easy-to-use package.

**Nelly: F** "Can I uninstall it now?"

**Fred: C** "I like having all the stuff in one place, but AOL is too confusing and expensive."

## .Mac

URL: [www.mac.com](http://www.mac.com)

Price: \$99.95 per year

System Requirements: Mac OS 9 or later



**.Mac** is unique among the Web services we're rating here in that it doesn't actually get you online—that's up to you. Instead, .Mac offers a range of specialized Web features for Mac users. Unfortunately, this means you have to pay for .Mac on top of your ISP costs.

Offerings include iDisk, an online storage space that shows up as a hard drive on your desktop; an @mac.com email address and AOL instant-messenger name (for use with iChat); an online address book; Web space, along with HomePage, Apple's Web-based site-building software; Apple's homegrown backup software; virus software; and a few other odds and ends.



## Report Card:

### Interface

.Mac is a collection of online components, so it doesn't have a main interface. You access it via [www.mac.com](http://www.mac.com) or from different parts of the Mac OS.

**Nelly: A** "Interface? Who needs an interface? .Mac is completely integrated throughout OS X. Brilliant."

**Fred: C+** "I keep forgetting how to load my iDisk. It's a little too complicated."



A HomePage link in iPhoto's toolbar and the ability to mount iDisk from the Finder's Go menu are just two of the many ways .Mac integrates with OS X.

### Usability

.Mac is a natural extension of your OS and is integrated into a number of Apple apps, like the Finder, iPhoto, iCal, Address Book, and iSync.

**Nelly: A** "iDisk is the most useful tool of the bunch—almost worth the price of admission alone."

**Fred: C** "I like iChat—it just works. But how do you use all that syncing stuff again?"



iDisk gives you a Web-based hard drive.

### Web

You get 100MB of space to use for online storage, hosting Web pages, or sharing files with other Mac OS X or Windows XP users (through Apple's new publicly available iDisk utility).

**Nelly: A** "100MB of iDisk and Web space! The integration with

iApps is a time-saver, even for a pro like...um...me."

**Fred: A** "I love Apple's HomePage software—even I can make Web pages!"

### Email

You can access your @mac.com POP email address via your email app of choice or the Web. You can even check other POP email accounts via the [www.mac.com](http://www.mac.com) Web site (and you get 15MB of mail space).

**Nelly: C-** "Lots of mail space, and the ability to check other POP accounts is handy. However, the lack of a spelling checker in the Web mail is nearly unforgivable."

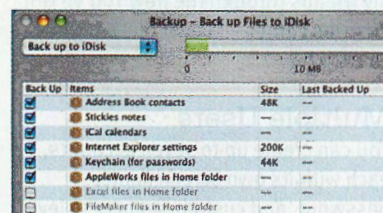
**Fred: B** ".Mac works so well with Apple's Mail program."

### Extras

In some ways, all of .Mac's offerings are extras. But it goes above and beyond other products with its contact and calendar syncing, as well as virus and backup software.

**Nelly: A** "The ability to sync all your contacts and calendars across iCal, Address Book, and your online address book is sweet. Backup is handy—but I'm glad I'm on broadband."

**Fred: B** "I'm not sure I'd use all this stuff, but it's good to know it's there."



Apple's backup software is a quick and easy way to back up important files to your iDisk, CD, or DVD.

### Multiple Users

.Mac is a one-account-per-person service.

**Nelly: F** "If the kids want their own iDisks and stuff, it's \$99 a pop. That's too much."

**Fred: F** "HomePage lets me design multiple pages so every member of the family can have a Web page, but I still wish I could just add Frieda and Freddy Jr. to my account without having to pay nearly 200 more bucks."

### Value

You have to pay for .Mac above and beyond the cost of an ISP.

**Nelly: A-** "If you move around a lot, particularly if you have a laptop and you travel, .Mac is definitely worth it. But I still wish it were called iTools and came free. Still, it's only \$8.33 a month."

**Fred: C-** "I'm not sure I'd use the features enough to justify an extra \$99 a year."

### Overall

.Mac offers lots of extras, is tightly integrated with Mac OS X, and adds cool functionality to the iApps—for instance, the ability to quickly publish a Web site full of photos from iPhoto.

**Nelly: A-** "Definitely the most innovative and worthwhile Web service going."

**Fred: C+** "It seems like a little too much—and too expensive for something that doesn't even connect me to the Internet."

## EarthLink

URL: [www.earthlink.net](http://www.earthlink.net)

**Price:** \$21.95 a month for dial-up service (first 45 days free); high-speed options include cable, \$41.95 to \$45.95 a month, and DSL, \$49.95 a month (first six months \$29.95)

**System Requirements:** System 7.6.1 or later



EarthLink is the higher education of Internet services, while using immersive services like AOL and MSN is a bit like being placed in the special-needs class at elementary school.

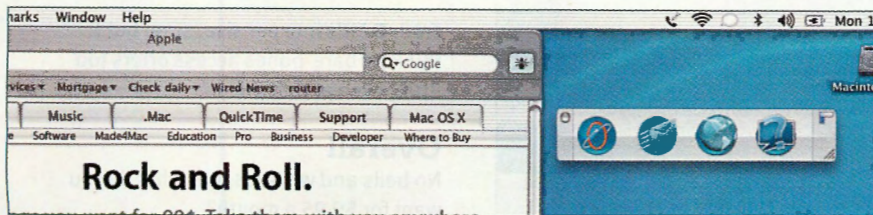
The only software EarthLink provides is Total Access, a small floating control panel for quickly logging in, checking email, launching a Web browser, or getting technical support. EarthLink has also partnered with a number of cable and phone companies to cover your high-speed options.

## Report Card:

### Interface

EarthLink's Total Access is a resizable floating palette with four buttons for logging in, launching email or a Web browser, and contacting tech support.





EarthLink's Total Access control palette is its only addition to the Mac OS X interface.

Nelly: **B+** "I don't need buttons to help me dial in and launch my Web Browser—and if I did, I'd want them in the Dock or menu bar. At least I can turn off Total Access."

Fred: **B** "The controls are easy to understand, and I don't have to dig around in preference panes to find everything. But why does the palette always have to be in the foreground?"

## Usability

Total Access allows easy access to the Internet, and there are very few extras to confuse matters.

Nelly: **B+** "Once I turn off the Total Access software, I've got a plain ol' solid ISP."

Fred: **B-** "Getting up and running took just a bit more time than with AOL or MSN, but once set up, everything worked great. How come there's no button that takes me to the extras EarthLink offers?"

## Web

You can use any Web browser—and clicking the Web button on the Total Access palette takes you to your favorite sites. You get 10MB of personal Web space, along with a Web-based site builder.

Nelly: **A-** "Total Access is a pain to customize, and its built-in channels are nearly worthless. But I can turn it off and surf normally."

Fred: **A** "I like using a regular browser in EarthLink, instead of having to use the AOL or MSN windows—those feel somewhat patronizing."

## Email

EarthLink gives subscribers a POP mail account, which you can access through your own email program or from EarthLink's Web mail.

Nelly: **B-** "It's straightforward, with decent spam-blocking software—well,

I haven't gotten any spam yet. But no spelling checker in Web mail sucks."

Fred: **B+** "Setting things up is a little more work than with AOL or MSN, but using the Web for checking email works great. As with AOL, it was hard to find an unregistered user name."

## Extras

EarthLink offers only a few extras—AOL Instant Messenger, 10MB of Web space, and the Web-based site builder Trellix.

Nelly: **C** "What extras? All standard-issue mediocrity, I say."

Fred: **B-** "I really liked making my own site with the Trellix software."

## Multiple Users

EarthLink offers up to eight individual email addresses per account.

Nelly: **B** "Easy enough to set up accounts for everyone in the family—but again, standard-issue stuff."

Fred: **B** "Once I figured out how to do it, I gave everyone in the family their own email address. Too bad the child-protection software is Windows only."

## Value

You have several options for both dial-up and broadband access.

Nelly: **B-** "A whopping \$22 for a dial-up account and 10MB of Web space? Sheesh. Broadband costs are respectable, though."



The choices from the EarthLink icon include log-in settings, tech support, and access numbers.

Fred: **B** "It seems reasonable to pay a little more to be with a big-name company—but Juno is cheaper."

## Overall

Instead of spoon-feeding you content, EarthLink concentrates on linking you to the Internet and your email. It also provides a few extras and lots of broadband options.

Nelly: **B** "EarthLink offers everything I'd expect from a solid ISP—and it also offers broadband."

Fred: **B** "Easy to use and reliable."

## Juno Platinum for OS X

URL: [www.juno.com](http://www.juno.com)

Pricing: \$9.95 per month

System Requirements: Mac OS X only



Juno is a no-frills nationwide service in the same vein as EarthLink, but much cheaper.

In fact, the single most important aspect of Juno is its price of \$9.95 a month—far less expensive than any other national service, and generally cheaper than most local ISPs.

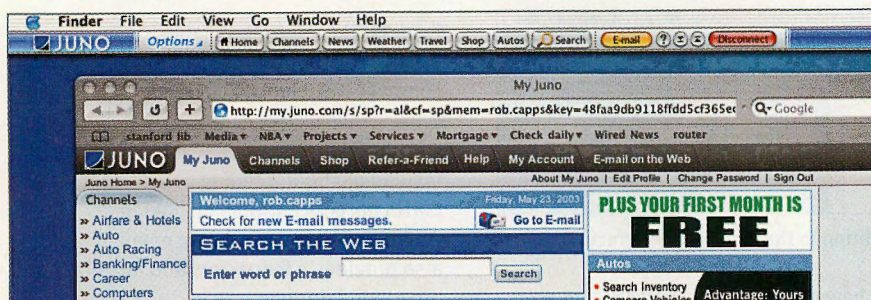
The trade-off, of course, is that Juno doesn't really come with much beyond basic dial-up service (you can run it on top of broadband, but what for?). Extras like personal Web space and multiple email addresses are notably missing. Juno does offer a small piece of software in the form of a navigation bar at the top or bottom of your screen, through which you can access an online portal for searching, shopping, accessing Juno partner sites, or checking email in Juno's Web-based mail client.

## Report Card: Interface

The only interface Juno has is its access bar, which provides buttons for launching various parts of the Juno portal, checking the status of your account, connecting to the Web-based email software, and logging off.



# ISPs Put to the Test



You can place Juno's toolbar at the top or bottom of your screen—or turn it off altogether.

**Nelly: B+** “I would never use the Juno portal, so the access bar is worthless to me. Luckily, I can turn it off.”

**Fred: B-** “The access bar is small, but I don't always like the sites to which the links in the bar take me.”

## Usability

Juno's access bar helps make hopping around the portal and getting mail as easy as possible.

**Nelly: B+** “Since it's a national service, Juno offers access numbers across the country, which is a real boon compared to local ISPs. But that's pretty much true of every service we tested.”

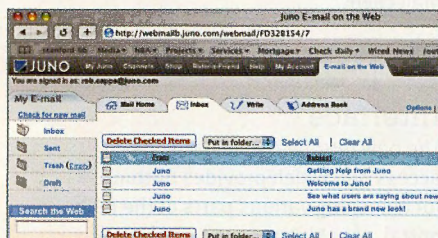
**Fred: B** “Getting set up was easy, and searching, shopping, and checking email is all just a click away.”

## Web

Juno offers no Web space and doesn't provide a browser. It does have the Juno portal, however, with a somewhat customizable home page and quick links for services including weather, stocks, and 19 others.

**Nelly: D** “No Web space? Lame. And this portal is weak. I can't even customize the news on the home page—just stocks and weather.”

**Fred: D** “The portal links are much worse and more random than those offered by MSN.”



Juno's Web mail is generally equivalent to other Web-mail services.

## Email

By default, Juno relies on its Web-based mail service, which includes a standard 10MB mailbox and address book.

**Nelly: C+** “Spelling checker—finally! Bravo! But no filters, email forwarding, or autoreply. *Merde!*”

**Fred: B+** “Easy to understand.”

## Extras

Juno cuts out the extras to cut cost.

**Nelly: F** “What extras?”

**Fred: F** “What extras?”

## Multiple Users

Juno has no support for multiple users—just one address per account.

**Nelly: F** “Nada.”

**Fred: F** “I guess the kids will have to use *my* email account. Bummer.”

## Value

Juno shines at \$9.95 a month.

**Nelly: A** “It's \$10 a month? That's just three 6-inch Subway Cold-Cut Trios—yum!”

**Fred: B** “It's inexpensive, sure, but I think its bare-bones access offers too little, even at that price.”

## Overall

No bells and whistles, but what do you want for \$9.95 a month?

**Nelly: C** “If I wanted a dial-up ISP, Juno's nationwide dial-in numbers and low price would be very appealing. But I don't want dial-up service anymore, and Juno doesn't offer broadband.”

**First Time Fred: C-** “I just feel I need—and want—more.”

## MSN for OS X

**URL:** [www.msn.com](http://www.msn.com)

**Price:** \$21.95 per month for dial-up (first two months free); \$9.95 per month for software only (first two months free) if you supply your own high-speed connection

**System Requirements:** Mac OS X (MSN for OS 9 is available but lacks many of the features listed here)



**MSN**, like AOL for OS X, is a complete experience, sporting a unique interface and its own Web browser and email program (based on Microsoft Internet Explorer and Entourage). MSN offers Internet access through dial-up, or you can run the software on top of your own high-speed connection.

MSN is more streamlined than AOL, offering original content only in the form of its Money Plus financial-

## Report Card

All the grades from all the tests.

	AOL		.Mac		EarthLink		Juno		MSN	
	Nelly	Fred	Nelly	Fred	Nelly	Fred	Nelly	Fred	Nelly	Fred
Overall	F	C	A-	C+	B	B	C	C-	B-	A
Interface	F	C-	A	C+	B+	B	B+	B-	B	A+
Usability	F	C-	A	C	B+	B-	B+	B	C	A
Web	F	C-	A	A	A-	A	D	D	D	B+
Email	F	C-	C-	B	B-	B+	C+	B+	B	A
Extras	F	B+	A	B	C	B-	F	F	C	A
Multiple Users	A	A	F	F	B	B	F	F	A	A
Value	F	D	A-	C-	B-	B	A	B	B-	A

If you want options and control, take Nelly's word.

If you just want simplicity and a few cool features, Fred's your man.





MSN consists of its own browser and its Dashboard side panel for storing extras.

management services and a research section featuring Microsoft's Encarta encyclopedia. It provides several useful tools, including Microsoft Messenger for chatting, quick links to the MSN Web network, parental controls, and an online calendar and address book.

## Report Card:

### Interface

There's a special Web browser that gives you access to all of MSN's features, including email. The customizable Dashboard lets you keep tabs on stocks, your in-box, and local weather.

**Nelly: B** "Fairly well designed and attractive, but a bit excessive in terms of the amount of screen space it takes up."

**Fred: A+** "Much less cluttered and easier to understand than AOL."

### Usability

Anyone who's ever used a Web browser will quickly feel right at home in MSN.

**Nelly: C** "The integration between features such as Web browsing and the mail client is solid, but why does every channel have to take you to an MSN site? Oh, yeah...never mind..."

**Fred: A** "It's easy to find all the tools like chat, calendar, and email. Even I can customize the interface."

### Web

MSN offers its own Internet Explorer-like Web browser. Various MSN network channels provide search, news, weather, and shopping.

**Nelly: D** "It's not as robust as the full Explorer, and when I tell MSN I don't

want MSNBC links on my home page, I mean it, damn it—but it ignores me."

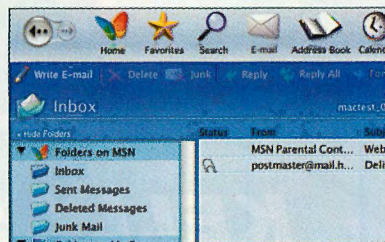
**Fred: B+** "The search feature had trouble finding some things, but everything else worked great."

### Email

MSN offers its own built-in Entourage-based email client, which you access through the MSN browser (you can work offline, though). To retrieve email remotely, you have to rely on Hotmail.

**Nelly: B** "A decent mail program—far better than AOL's. No support for adding your own non-MSN POP accounts, though."

**Fred: A** "I like the preview pane, and the option to send pictures by dragging them into the mail window is slick."



MSN offers a mail client based on Entourage.

## Extras

MSN offers exclusive tools and content through its financial and research channels, as well as a calendar and built-in chat client.

**Nelly: C** "The learning section is actually pretty cool, no matter how experienced you are. I don't think I would use much of the other stuff."

**Fred: A** "The research tools are great for finding facts and information that take forever to locate on the Web. I like the money tools as well."

## Multiple Users

MSN lets you add accounts for up to eight people and offers parental controls to allow varying access to the Web, email, chat, and other features.

**Nelly: A** "Setting up and logging in and out of multiple accounts is just like how you do it in OS X."

**Fred: A** "If MSN didn't let me control Freddy Jr.'s Web access, I don't know how he'd ever get his homework done."

## Value

The dial-up rates are comparable to EarthLink's and slightly lower than AOL's.

**Nelly: B-** "A solid ISP, but why pay for MSN software when you can do the same stuff on the Web for free?"

**Fred: A** "I don't mind the price considering all the guidance I get."

## Overall

You can get most of MSN's services elsewhere—MSN simply packages them for your convenience, and does so better than AOL.

**Nelly: B-** "It's well designed for what it is. Although I wouldn't choose MSN, I'd get it for my grandparents."

**Fred: A** "Sign me up!"

## The Bottom Line



**Nerdly Nelly:** ".Mac gets my top grade. It's clearly the best integrated with Mac OS X, and the most valuable service of the bunch for me, since I rely on my local carrier for high-speed Internet access."



**First-Time Fred:** "I'm going with MSN. It may be from the company that makes the operating system I just escaped from, but it offers the best combination of services, ease of use, and price."



Former *MacAddict* editor Robert Capps divides his time between freelance writing and studying philosophy. All he can tell you for sure is that he *is*—at least he thinks so.



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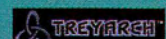
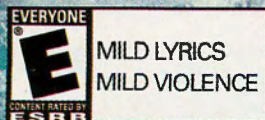
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# Absolutely Unreal



The shooter everyone's been waiting for:  
**Unreal Tournament 2003**



 **ON THE DISC**  
Unreal Tournament  
2003 demo

by Cathy Lu





In Bombing Run, shoot the futuristic dystopian "ball" into the futuristic dystopian "basket."



Use the shield gun for protection and for close combat.

## GAME INFO

Publisher: MacSoft/Destineer

Developer: Epic Games

Contact: 866-512-9111, [www.macsoftgames.com](http://www.macsoftgames.com)

Release Date: June 11, 2003

Price: \$49.99

It's been three-and-a-half long and lonely years since the original Unreal Tournament for Mac was released—not that we've been counting. Finally, the wait is over. Its sequel, Unreal Tournament 2003, is here—and it was worth the wait.

Available June 11, UT2003 (or UT2K3—take your pick of abbreviations) takes this first-person shooter franchise to the next level—and beyond. For starters, you'll want a 700MHz G4 (not a G3, as recommended for the demo) stocked with 256MB of RAM and at least an AGP Radeon or GeForce2 MX graphics card with 32MB of VRAM. Why so much power? Well, according to Epic Games' Ryan Gordon, lead programmer for the Mac version, it's because "UT2003 pushes hardware in ways no other game has. We're moving more polygons, using higher-resolution textures, and processing a bigger world with more going on in it."

Not only is the game built to look better than the original Unreal Tournament, but it's built to play better. There are two completely new

game types: Bombing Run ("Think rugby with guns," says Gordon) and Double Domination, in which you must capture and hold two control points for a certain amount of time. Plus, the Mac version ships with bonus packs, which offer even more game types. Of course, there are also the old favorites: Deathmatch and Capture the Flag.

There are also new ways to move, such as double-jumping and wall-jumping (à la *The Matrix*), as well as better AI and the addition of adrenaline pills (collect 100 points worth and you get superpowers for a few seconds). Add to that new weapons: For instance, Epic has replaced the sniper rifle with a lightning gun. Like the sniper rifle, the lightning gun can zoom and do one-shot-kill headshots—but "with much more style," says Gordon. Also, the gun's rate of fire isn't as fierce as the original rifle, which provides for more-balanced gameplay—meaning that if it's used against you, there's a chance you can locate your would-be assassin before you're pulverized.

As Gordon describes the lightning



The assault rifle is best suited to battles against weaker enemies.

All of these gorgeous graphics come at a price: maybe the price of a new Mac.







The Link Gun's primary firing mode is the same as its plasma-firing ancestor, but the secondary firing mode is now an active-scanning, switchable energy matrix (aka a swirling green beam).

## FROM THE SOURCE

For those of you who already have your finger on the trigger (aka your mouse), we asked Ryan Gordon, lead programmer for UT2003 Mac, for his insider advice on how to kick serious Unreal butt.

1. Learn to wall-jump and double-jump.
2. Hoard adrenaline—learn to use the right combo at the right time.
3. Learn to command your AI teammates effectively. (The new bots are much smarter than the ones in the original game.)
4. Take advantage of the translocator's new camera feature for tactical advantage.
5. Don't get hit. Don't miss.

gun: "There's nothing quite like replacing someone's head with a piece of charcoal from across the map!"


So what's *not* new? Still no verbal communication capabilities or level editor, although the former should appear in UT2004, and the latter is on the developers' minds. "The editor is very Windows-centric right now, but we're looking at what it would take to make it cross-platform for the next rewrite," says Gordon. "Hey, it's progress—the first version of the editor was a Visual Basic application!"

Of course, a huge component of UT2003 is its multiplayer capabilities. The Mac version is fully network compatible with the Windows and Linux versions, so you can host a multiplatform server or play on non-Mac servers (that is, if it doesn't make you feel too dirty). Good news

for modem users: UT2003 uses less bandwidth than the original UT. (But even so, why the hell are you still using a 56K modem?)

You know a game's a huge deal when Apple updates the OS just so you can play a demo. That's exactly what happened when Apple released the Mac OS 10.2.6 update in May. Among other fixes unrelated to UT2003, the 10.2.6 update cured a bug in which the tech demo would crash on Macs with GeForce2 MX and GeForce4 MX graphics cards. For those of you with ATI cards, UT2003 runs fine on 10.2.5. In fact, the frame rate is four times faster on 10.2.5 than on 10.2.4 thanks to a little ATI engineering magic.

So besides better graphics, better gameplay, and better weapons, what else can you look forward to? How about the final single-player level, DM-Serpentine? It's one of Gordon's favorites. "You are always stalking—and being stalked—by one other player. You know exactly where your enemy is, but there's also enough room to maneuver. It's very intimate but leaves some escape paths."

 MacAddict Executive Editor Cathy Lu likes to keep it real—even when playing Unreal.



On golden pond....with huge guns.



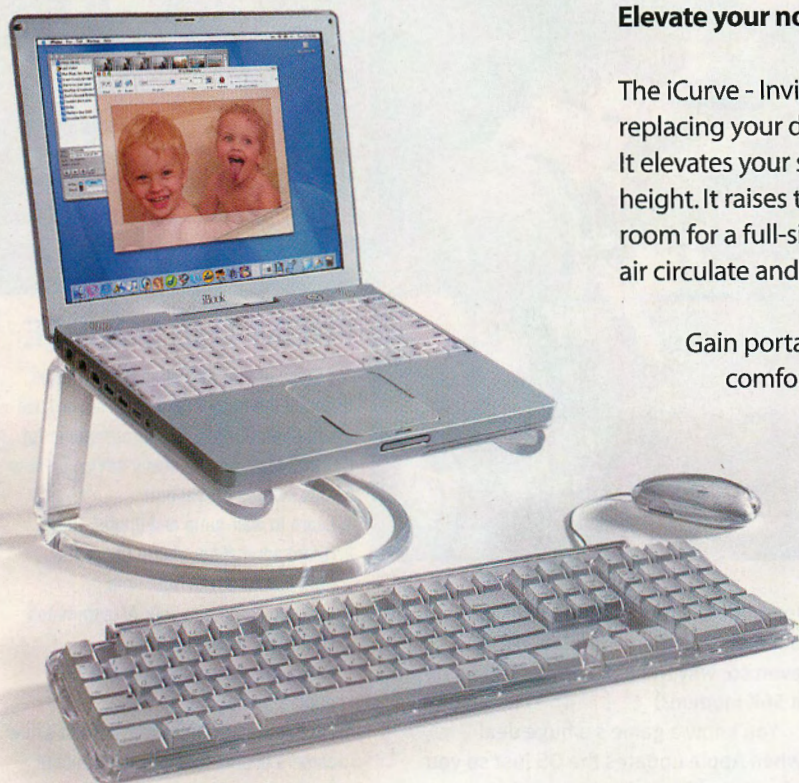
If you want to take a closer look from a safe distance, shoot the translocator...



...and use its newly installed camera to peer (default key: Q).



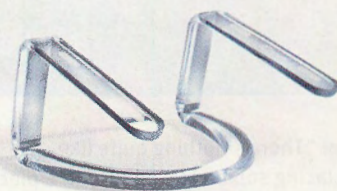
# i wanna take you higher...



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## TheHotList

- 56 The best of the best from recent reviews.

"Talk to the hand" takes on a new meaning when the hand is holding a fancy-pants new Palm PDA with a camera on its back—namely the Zire 71, pictured here. We're not exactly sure what that new meaning might be, but it sure is fun to sneak snaps of poor suckers stuck in meetings who think we're just jotting notes on our PDA. Other fun this month came in the form of real surround-sound audio solutions for everyone, even iBook owners; oodles of iPod accessories; and the unlikely king of the consumer-Mac hill: the surprisingly snappy 1GHz eMac. In the near future, we'll talk terabytes—if we can find someone buff enough to lift Apple's hefty 100-pound Xserve RAID up onto our test bench.



Compatible with  
Mac OS X or later.

Compatible with  
Mac OS 9 or earlier.



If we were  
shopping for this  
type of product,  
this is the one  
we'd buy.



# 1GHz eMac

## ALL-IN-ONE G4 MAC

Just when we thought the ol' cathode-ray tube was finally going the way of the dodo and *Buffey, the Vampire Slayer*, Apple sent us the newest member of its CRT-equipped all-in-one family: the 1GHz eMac. Apple is quick to point out that the eMac's *e* is for education, but with its \$1,299 price tag, we say *e* is for everyone, at least in the consumer market. The eMac's only competition is the iMac G4, which will run you \$500 more when similarly configured—and, believe it or not, which trailed the eMac in all of our real-world tests.

### The eMac consistently embarrassed the iMac.

Compared to the original 700MHz eMac (*Reviews*, Sept/02, p42), the new top-of-the-line eMac is a monster. Besides the extra 300MHz of processor power, you also get twice the RAM (256MB in the same two-slot configuration, with a 1GB maximum capacity); twice the disk space (80GB) in a faster, Ultra ATA/100, 7,200-rpm mechanism; and a fast

(4X8X write, 8X16X32X read) SuperDrive. On the graphics side, it has the same 32MB of VRAM as previous eMacs, but it pairs that VRAM with an ATI Radeon 7500 chip set, as opposed to the nVidia GeForce2 MX of yore. The eMac's 17-inch flat-panel CRT remains unchanged, and it looks a little grainy when viewed next to the smooth-as-a-baby's-bottom LCD with which Apple spoils iMac owners. To be fair, the iMac's screen looks a little washed-out and lacking in contrast next to the eMac's.

But here's where the comparison gets interesting: The 1GHz iMac is equipped with a 64MB nVidia GeForce4 MX video system, yet our testing with the Unreal Tournament 2003 demo (on the Disc) had the eMac eking out a slightly faster fps rate than the iMac: 56.4 over the iMac's 55.3 in the flyby test. What's more, in this and other tests (see "Consumer S-Mac-Down," below), the eMac consistently embarrassed



PHOTOGRAPH BY MARK MADEO

**Despite what Steve says, the CRT is not dead—not even at his own company.**

the iMac—performing feats such as exporting a 1.25GB iMovie in 3 minutes as opposed to the iMac's 5.

Suspecting a hidden sandbag—such as human error or a fragmented disk—we tested and retested, even reformatting both machine's drives and reinstalling Mac OS 10.2.6 on both. We stopped short of swapping the two machines' hard drives—though we suspect that a slow drive was holding back the iMac. Spec-wise, the two Macs use the same type of drive—80GB, 7,200 rpm on an ATA/100 bus—but Apple, as usual, declined to comment on minutiae such as drive models or manufacturers. Our test results even stymied the propellerheads deep in the bowels of Apple's engineering labs: Other things being equal (the system bus, processor cache, hard-drive speed, and so on), the iMac, with its DDR-RAM and advanced system architecture, should leave the eMac in the dust—in some of our tests, at least. Frankly, we're still scratching our heads. So are the folks at Apple.

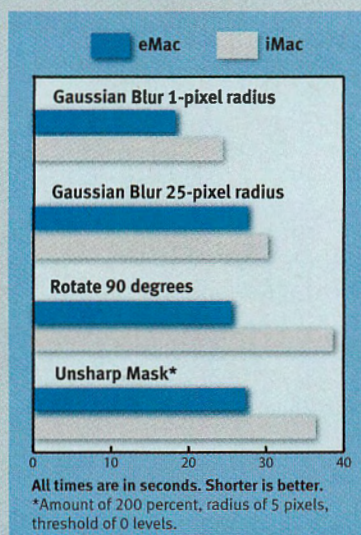
Given the \$500 price differential, the eMac looks way better on paper. Aesthetically, though, the iMac leaves it way behind. For our money, the iMac's ergo-maniacal neck, smaller footprint, and general coolness are worth going into hock or debt, benchmarks be damned. But if shelling out five Franklins (or one McKinley) gives you pause, go ahead and pop for an eMac—you won't be sorry.—*Niko Coucouvanis*

## CONSUMER S-MAC-DOWN

How much bang do you get for your eMac buck? Lots, according to our real-world Adobe Photoshop Elements benchmarks.

Other tests focusing on the SuperDrive revealed more-comparable results. These included ripping and burning CDs in iTunes and, uh, "backing up" a DVD copy of *Down Time*, a gritty prison drama ripped from today's headlines, starring *MacAddict's* own reviews editor, Niko Coucouvanis.

We tested with Adobe Photoshop Elements 2, using a 115MB PSD file. Both Macs were equipped with 256MB of RAM and were running Mac OS X 10.2.6.



**COMPANY:** Apple  
**CONTACT:** 800-795-1000 or  
408-996-1010, [www.apple.com](http://www.apple.com)  
**PRICE:** \$1,299

**SPECS:** 1GHz PowerPC G4 processor with 256K  
Level 2 cache, 256MB SDRAM (1GB max), 80GB  
ATA/100 disk, ATI Radeon 7500 with 32MB DDR  
SDRAM, 4X SuperDrive, integrated stereo speakers

**GOOD NEWS:** Massive bang for the buck.  
Faster than a similarly configured iMac.  
**BAD NEWS:** Massive, 50-pound, CRT-based  
beast. Nowhere near as elegant as an iMac.

**MacAddict RATED**  
★★★★★  
**GREAT**



# MovieWorks Deluxe 6

MULTIMEDIA-AUTHORING SUITE

If the name MovieWorks makes you think of video editing, think again. MovieWorks is an interactive-multimedia-authoring environment—that is, it can blend video, animated graphics, sound, and buttons into interactive presentations for business, education, and what have you. Think of MovieWorks as a light version—a very light version—of Macromedia's Director.

MovieWorks is actually a concoction of five different applications that work together. You can create media elements using the Video, Sound, Paint, and Animator apps, then with one click import those elements into the main MovieWorks app. Using MovieWorks' Sequencer window, which works much like a video-editing app's Timeline, you can group your media elements into Scenes (like chapters in a book), position the elements onscreen, and arrange when they'll play. You can also add text, standard QuickTime transitions such as fades, and script buttons to jump to any scene in your movie. When you're finished, you can export noninteractive presentations as QuickTime movies. Interactive presentations use MovieWorks' proprietary format and require an included Player application that you can distribute freely to users of Macs and Windows PCs.

MovieWorks imports a broad range of media file formats, including—take a deep breath—AVI, MOV, DV, and MPEG-1 video; AIFF, SND, MP3, MIDI, and WAV audio; PICT, BMP, GIF, JPEG, TIFF, and Photoshop images; plus VR movies and TXT text files. If you want



**Interactive multimedia is where it's at, and MovieWorks is the cheapest way to get there.**

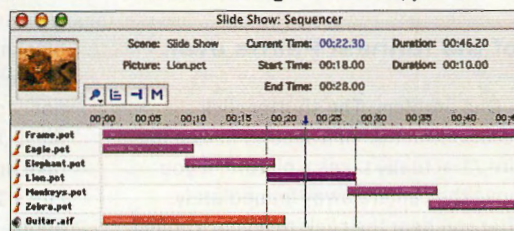
to create content within the program itself, however, you'll have to work with bare-bones tools. The Sound app is the most solid. You can record any audio source that's hooked up to your Mac; cut and paste waveforms; apply basic filters like Echo, Reverse, and Fade; and adjust volume levels. One audio limitation: There are no volume keyframes for real precision. The Video app can capture footage from a DV camera or analog source, but you can't trim a video clip once you place it in MovieWorks' Sequencer—this limitation makes editing tough. The simple Paint app can create solid or gradient backdrops and other no-frills artwork. With the Animator app, you can merge multiple pictures into animations, but you don't get any handy, vector-based animation tools like the ones in Macromedia's Flash and Director.

Though MovieWorks includes a library of free media to use in your movies, these are more Cheez Whiz than gee whiz. The buttons and backgrounds

have a dated feel, and many buttons don't even animate their up and down states. Much of the royalty-free music is in the vapid elevator genre, and often suffers from noticeable hiss and other signs of bad compression. The stock video clips of travel spots and other stuff are sized at a lowly 320-by-240-pixel resolution, which means they'll pixelate and look crappy if you want your presentation to play at a higher resolution.

Another beef we have with MovieWorks is its interface. A couple of years ago (*Reviews*, May/01, p60) it was *au courant*, but in the interim Apple's smooth iApps have

spoiled us, and MovieWorks now looks and feels clunky. Finally, considering that Interactive bills its software as easy to use, we were dismayed to find there was no pop-up help—such as tool tips that appear when you roll over an icon—or decent onboard help system. You don't even get a manual, just a



**MovieWorks' Sequencer works much like a standard animation timeline, but without any keyframes.**

tutorial showing how to create a sample interactive movie.

Still, if you need to do interactive multimedia and don't want to drop big coin on a bigger app, MovieWorks can do the job—actually, it's your only option. But beware: It's a mature app, and it's showing its age.

—Helmut Kobler

**COMPANY:** Interactive Solutions  
**CONTACT:** 925-734-0730,  
www.movieworks.com  
**PRICE:** \$99.95, \$39.95 (upgrade)

**REQUIREMENTS:** Mac OS 8.1 to 9.x  
or 10.1.5 or later, 128MB RAM

**GOOD NEWS:** Delivers basic interactive-multimedia authoring at a low price. Presentations can play on Macs and Windows.

**BAD NEWS:** Outdated feature set and interface. Included royalty-free media is lame. No documentation.

**MacAddict RATED**  
●●●●●  
**SOLID**



# Palm Zire 71

## PERSONAL DIGITAL ASSISTANT

With a built-in digital camera, MP3 player, and video player, the Palm Zire 71 is a multimedia-ophile's dream. In fact, we've been having so much fun taking candid pictures with the Zire 71 that it hardly seems like a boring old PDA anymore.

The highlight of the Zire 71 is a digital camera that's so seamlessly integrated your subjects won't even know you're taking pictures until it's too late—for them. Simply slide the Zire 71 open and aim its back at your subject, and the device's screen becomes your viewfinder. Push a button, and you've got yourself blackmail material in 640-by-480-pixel resolution—not great images, but not heinous, either. The whole time your subject thinks you're just checking yourself out in the screen reflection. When you slide the Zire closed, its screen displays a thumbnail library of all the pictures you've taken. And when you sync the Palm to your Mac, the pictures go straight into your Pictures folder.

### One of the funnest Palms ever.

One problem: The shutter click occurs a fraction of a second before the Zire 71 actually takes a picture. If you move the camera away immediately after you hear the click—or if your subject moves too soon—you get a big,

blurry mess. We got used to this bug, and quite frankly our subjects did more-amusing things *after* they thought we'd snapped the shot (even better blackmail material).

The Zire 71 also lets you watch—but not capture—video clips and play MP3 files. Of course, those types of files take up massive amounts of space—the Zire's 16MB of built-in memory can store about, oh, four MP3s. You'll definitely need to buy an SD card to store your files



Closed, the Palm Zire 71 is just another PDA.



PHOTOGRAPH BY MARK MADEO

Slide it open, and your PDA becomes a sneaky lil' camera.

(about \$60 for 64MB). The Zire 71 comes with RealOne Player for playing MP3s. Palm uses an app called Kinoma Player to play video clips—you'll have to install the included Kinoma Producer app on your Mac as well to convert MPEG-1, QuickTime, and AVI files into this proprietary format.

This device's nice touches include a five-way joystick for navigation (up, down, right, left, and press to select), a very bright transfective TFT LCD screen, and Graffiti 2—Graffiti's more gifted younger sibling. Among other things, Graffiti 2 lets you write lowercase and uppercase characters in different sections of the writing area so you don't have to indicate to your PDA first that you're making a capital letter.

Of course, the Zire 71 has the easy-to-use PDA software found in all modern Palms, but it's the little improvements we just mentioned, along with

that sweet lil' digital camera, that make this one of the funnest Palms ever—and one of our favorites.  
—Cathy Lu

## BUG OFF, SHUTTER BUG

Sure, you'll get better results with a dedicated digital camera. But somehow it's just not as fun...or as annoying for your subject.



**COMPANY:** Palm.  
**CONTACT:** 800-881-7256 or 408-503-7000, [www.palm.com](http://www.palm.com)  
**PRICE:** \$299

**REQUIREMENTS:** USB-equipped Mac, Mac OS 9.1 or 10.1.2 or later, 12MB RAM, 25MB disk space

**GOOD NEWS:** Integration of digital camera is seamless. Screen looks great.

**BAD NEWS:** Camera's shutter sound is out of sync with picture-taking. Not enough built-in memory for a media player.

**MacAddict RATED**  
GREAT



# gallery 1740 Platinum VGA

17-INCH VGA LCD

Not everybody's lucky enough to have a DVI or ADC video port on his or her Mac. If you have an iMac, eMac, iBook, 12-inch PowerBook, or a Mac older than a Power Mac G4 AGP Graphics "Sawtooth" tower and you want to plug in a display, you're stuck with old-fashioned analog VGA (Video Graphics Array) ports.

If so, Formac has some good news

call you a chump for considering any VGA-connected monitor over the superior quality of all-digital ADC or DVI. The price is a moot point—both Formac's gallery 1740 DVI and Apple's ADC-equipped Studio Display, two digital 17-inch LCD displays, cost the same as the gallery 1740 VGA: \$699.

Formac used the same LCD panel in both the gallery 1740 Platinum VGA and DVI modes, but some quality gets lost in the translation to analog VGA. There is a noticeable drop-off in color gamut, text crispness, brightness, and contrast. You can minimize much of the difference using the on-display controls and



The gallery 1740 Platinum VGA does the job—and looks pretty too.

**If you need a VGA display, get this one.**

for you: the gallery 1740 Platinum VGA, a great-looking 1,280-by-1,024-pixel display. If you need a VGA display, get this one. If, however, your Mac has ADC and/or DVI capabilities, we'd have to

ColorSync—in fact, Formac recommends that you fine-tune brightness and color temperature in ColorSync.

Digital DVI and ADC are the future, but if you still need VGA, you'll be happy with the gallery 1740 Platinum VGA. It does what it does well and looks good doing it.—Narasu Rebbapragada



**COMPANY:** Formac Electronic  
**CONTACT:** 877-436-7622 or  
510-528-9300, [www.formac.com](http://www.formac.com)  
**PRICE:** \$699

**REQUIREMENTS:** Mac with VGA  
video out

**GOOD NEWS:** A stellar VGA LCD display.  
**BAD NEWS:** Image quality inferior to that of  
comparable digital LCD displays.

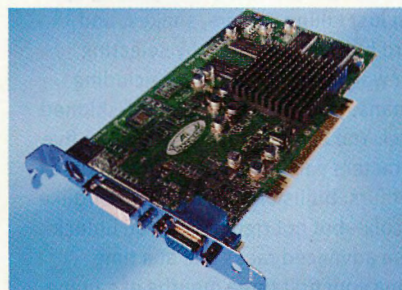
**MacAddict RATED**  
  
**SOLID**

# Radeon 7000 Mac Edition PCI

PCI VIDEO CARD

Who needs a PCI graphics card these days when dual-monitor AGP (Accelerated Graphics Port) video cards ship in every Power Mac? You do, if you want to affordably expand your pre-AGP Mac's display capabilities. ATI's Radeon 7000 Mac Edition fills this niche perfectly, adding dual-monitor support (one DVI and one VGA port), plus composite and S-Video.

Installation is a snap. Just load the included drivers and replace your old video card with the Radeon 7000. Or



The Radeon 7000 Mac Edition PCI supports dual monitors and TV out, all from one card.

stick the Radeon in any free PCI slot, either 33MHz or 66MHz, and it'll happily cohabitate with your current card.

With 32MB of DDR RAM, this isn't the burliest video card, but its 2D and 3D performance was noticeably better than that provided by our blue-and-white Power Mac G3's stock 16MB card. Games run better—we replayed some

old favorites, and the graphical glitches, hiccups, and lags were gone. The Radeon 7000 won't fool you into thinking you're running the latest and greatest, but the improvement is noticeable.

Like the AGP graphics cards that have been appearing in Power Macs since the early Quicksilver G4 towers, the 7000 can run two displays at once, either mirrored or extended (splitting the image between monitors). Alternatively, you can use the Radeon to power a bigger screen, up to an unreal 2,048 by 1,536 pixels on some monitors.

Sure, we'd prefer the latest bleeding-edge 64MB AGP card, but the Radeon 7000 is a solid step forward for those of us who haven't moved up to an AGP-equipped Mac. It may not perform dazzling tricks, but it'll blow the sock off your stock PCI video card. That's just one sock. Not both.—John Lee



**COMPANY:** ATI Technologies  
**CONTACT:** 905-882-2600,  
[www.ati.com](http://www.ati.com)  
**PRICE:** \$129

**REQUIREMENTS:** PCI-equipped Mac  
(Blue-and-White Power Mac G3 or later  
for Mac OS X support), Mac OS 9.2.x  
or 10.1 or later

**GOOD NEWS:** Versatile. Trouble-free drivers.  
Running two displays on one PCI video card rocks.  
**BAD NEWS:** Doesn't provide a huge performance  
upgrade over PCI video cards in most older Macs.

**MacAddict RATED**  
  
**SOLID**

PHOTOGRAPHY BY MARK MADEO



# Shadowbane

MASSIVELY MULTIPLAYER ONLINE  
ROLE-PLAYING GAME

Time to join a few thousand of your closest friends and go monster-bashing on the Internet. Shadowbane, a dark new fantasy world from Ubi Soft, piqued our bloodlust with its combined role-playing and strategy elements, and kept our interest with rapid character advancement and fun, effective collaboration with other players.

The latest in massively multiplayer online role-playing games, Shadowbane is a shot in the arm for a gaming genre that truly needs it. Like most MMORPGs, Shadowbane first plunges you into a

monsters without fear—don't worry, no group hugs are involved.

And the game is *fun*. Most MMORPGs keep players on an endless treadmill, trying to add points and gain experience to move up. But advancing in Shadowbane can be fast and easy. Instead of fighting to stay alive, you can go critter-hunting, mingle with other players with whom you can join to slaughter monsters, and watch your status levels soar. Working in groups is the key. You get the same experience points for killing in a group as you would get alone, but the kills come much faster. We estimate that you can rise to level 30 and be ready for PvP competition in a leisurely two or three weeks—faster, if you have no life.

Of course there's more to moving up than just killing spiders, snakes, and lizard hunters. You start by selecting your warrior from ten races, including humans, elves, shades, and red-skinned Irekei. You can create and save up to five characters each. You can even try horsey Centaurs, bullish Minotaurs, and birdlike Aracoix—but not right away. You unlock these advanced races one at a time during your first three months of gaming.

Once you reach level 10, you choose a profession (bard, warrior, warlock, assassin, and so on). There are more than 20 professional classes and some 40 subclass disciplines. By the time you reach level 20, the real gaming begins. You leave your safehold city and ascend into a world of guilds and the many conflicts that arise among them. You and your chosen guild will build cities with shops, merchants, houses, armorers, and fortified walls. Other guilds may

besiege your city, loot it, occupy it, or burn it to the ground, so you need to recruit armies to protect it.

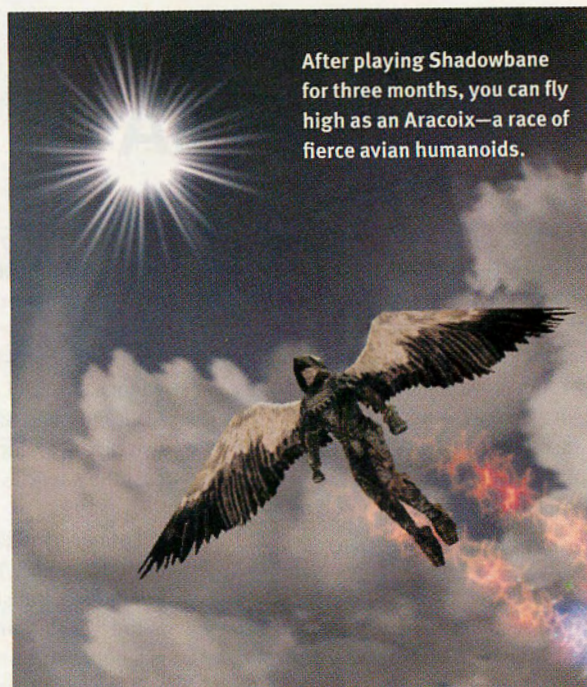
The downside—other than being attacked by a jealous guild, that is—include barely acceptable graphics, no quests to speak of, no dungeons to crawl (at least not yet), and interface windows that pop up unexpectedly and soon become annoying.

Overall, however, whether you're a newbie or an experienced MMORPGeR, Shadowbane has a lot more going for it than against it—especially its safehold scheme and quick level-jumping. Go ahead—grab a copy, go online, and indulge your fantasies.—*John Lee*

## MMOR...WHAT?

Shadowbane is a cross-platform MMORPG—a massively multiplayer online role-playing game. Great, now what the hell is *that*?

Simply put, it's an online role-playing world in which both Mac and PC players can meet and play at any hour of the day or night. Because Shadowbane's world is persistent, it continues to exist and advance whether you're logged on or not.



After playing Shadowbane for three months, you can fly high as an Aracoix—a race of fierce avian humanoids.

**Here's a shot in the arm for a gaming genre that truly needs it.**

chaotic landscape full of confusion and strife—but you don't just hack and slash your way through the monster-infested countryside, picking up loot and building your character. No, it's a more intelligent game than that. As it progresses, role-playing blends with strategy, and you can join guilds and work with others to



**Meet two of the thousands of players waiting online to fight with you or against you.**

build and manage cities, recruit armies, and engage in siege warfare.

You start the game in a safehold city where people-versus-people (PvP) carnage is prohibited. You get lots of PvP in higher levels, but until then you get to wander through the countryside alone or in groups and clean up



**COMPANY:** Ubi Soft  
**CONTACT:** 919-460-9778, [www.ubi.com](http://www.ubi.com)  
**PRICE:** \$39.95, \$12.99 monthly subscription to play online

**REQUIREMENTS:** 350MHz G3 or faster, Mac OS 10.2 or later, 128MB RAM, 1GB disk space, Internet connection, 32MB VRAM

**GOOD NEWS:** Clever combination of role-playing and strategy gaming. Level climbing is fast and furious.  
**BAD NEWS:** Graphics are dated. Performance lag during peak hours. Interface windows can clutter screen.

**MacAddict RATED**  
  
**GREAT**



# Color LaserJet 1500L

COLOR LASER PRINTER



This is an entry-level unit, so we don't feel too mean calling it *My First Color Laser Printer*.

How do you make a laser printer less boring? Easy: Throw in color-toner tanks so it can print photos and color brochures along with the expected mountains of laser-sharp text. HP's just-released Color LaserJet 1500L is a fine example. That L, it seems, stands both for *limited* (16MB of RAM, a 125-sheet paper capacity, and USB-only connectivity) and *low*, as in price: 800 simoleons for a color laser printer is a

**Eight hundred simoleons for a color laser printer is a pretty sweet deal.**

pretty sweet deal—although the price jumps to \$999 if you want an extra 250-sheet input tray. Ethernet adapters start at \$159, replacement toner cartridges are \$82.99 for 5,000-page black, and \$99.99 each for 4,000-page cyan, magenta, and yellow.

Despite how fat and happy (and Fisher Pricey) it looks, this printer isn't terribly friendly—at least not over here in Mac-ville. For starters, the quick-start brochure is 50 pages long. Granted, it contains setup instructions in 17 languages—HP is apparently expecting hot sales in Israel—but we prefer the

standard poster-size guides, which take *all* of the guesswork out of setting up a printer as complex as this one. The included PDF manual is thorough enough, but a lot of it is irrelevant to Mac users because it deals with the 1500 Series Toolbox, a Windows-only utility suite.

The 1500L's quick warm-up time impressed us—most laser printers sputter and shake for at least half a minute when starting a print job after a period of inactivity, but this one cuts the stammering down to about 15 seconds for text (black-only) printing. The 1500L also prints quickly, meeting its claimed 16-ppm black and 4-ppm color specs. More impressive is the quality of text the 1500L spits out: Text was sharp and crisp, and even the minuscule type we got when printing 16 pages to a single sheet was legible (though barely).

Photos came out cleaner than we expected on such an inexpensive color laser printer, with good color accuracy

and fairly sharp detail, although they looked muddy next to a glossy, high-res printout from a six-color inkjet photo printer. Composite documents with nonphoto graphics—think presentations and Excel charts—are the 1500L's specialty, and the printer delivers for the most part. Edges and borders are sharp, but dark colors exhibit slightly uneven ink coverage. Black-to-white and color gradients printed with visible banding, most noticeably in the midrange, and the printer punted on the lightest shades of gray, displaying white instead.

The 1500L doesn't do PostScript—it's a host-based printer, meaning that your Mac provides the brainpower, rendering and processing pages before sending the data to the printer. We can live without PostScript—the 1500L printed everything we threw at it, including mountains of text, mongo Acrobat PDFs and InDesign files, and 200MB Photoshop images, all with smooth background processing (thanks, Mac OS X!)—but if you need PostScript, the 1500L isn't for you.



**The imaging drum and four toner cartridges slide right in, as illustrated by the handy picto-stickers.**

Out of the box, this printer is ideal for folks demanding high-quality output, with some limitations—not a lot of it in one run unless you buy the extra paper tray; not from multiple workstations unless you buy the extra network-card upgrade (or use USB Printer Sharing); and not at all if you're looking for glossy, Photomat-style photos.

Our final beef with the 1500L is the fine print: "USB cable not included." Sheesh—why are printer manufacturers so cheap?

However, if you can accept its limitations, this color laser printer reaffirms the old adage that you get what you pay for—and we mean that in a good way.—*Niko Coucouvanis*



**COMPANY:** Hewlett-Packard  
**CONTACT:** 800-752-0900, [www.hp.com](http://www.hp.com)  
**PRICE:** \$799.99

**REQUIREMENTS:** USB-equipped  
Mac, Mac OS 9 or later

**GOOD NEWS:** Quick, crisp text printing with little warm-up time. Adequate color printing.  
**BAD NEWS:** Measly 125-sheet paper capacity. Utility software is PC-only.

**MacAddict RATED**  
●●●●●  
**GREAT**

PHOTOGRAPHY BY MARK MADEO



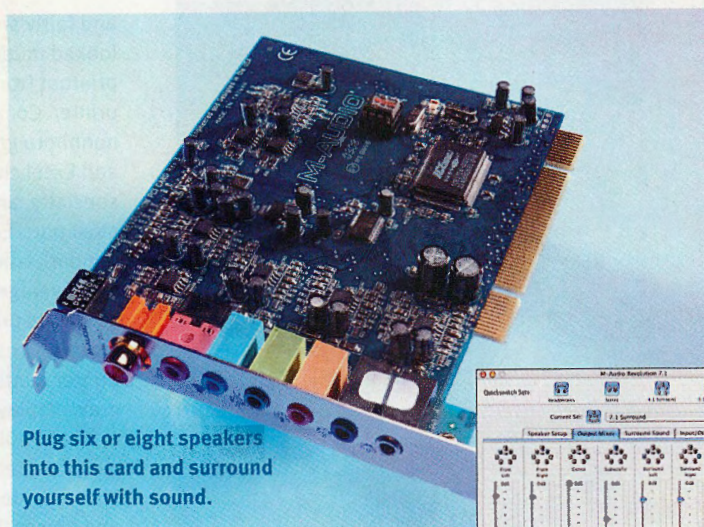
# Revolution 7.1

## PCI AUDIO CARD

Finally, true surround sound has come back to the Mac. Ever since OS X came around (and SoundBlaster audio-card drivers didn't), getting multichannel audio into or out of your Mac has been too expensive for the casual audiophile. No longer. M-Audio's Revolution PCI card provides a wealth of options for surround-sound encoding and decoding. And—to the delight of PowerBook and iBook owners—there's a USB version as well (see our review of Sonica Theater, next page). Both devices will happily play back the most common surround-sound formats from a DVD disc—Dolby 5.1, DTS, even the newer Dolby Digital EX—and all for around a measly 100 bucks.

As of Mac OS 10.1.5, the Apple DVD player (finally) passes DTS and Dolby Digital signals to the card unmolested instead of condensing the signal to the Mac's native two-channel stereo. This means you can now enjoy real (not interpolated) surround sound from a Mac—a huge development. Before Apple enabled multichannel digital-audio throughput in its DVD Player app, true surround sound required a component DVD player—your Mac was superfluous to your home-entertainment system.

One somewhat irritating limitation is the inclusion of only coaxial digital out, and not the more commonly used and convenient optical digital out. This is a pity, since it limits your options when connecting to another device, such as an external



Plug six or eight speakers into this card and surround yourself with sound.

amp-decoder or headphones based on the increasingly popular Dolby Headphone technology. However, since most users will want to make a direct connection to analog speakers from their Mac, this constraint isn't too big a deal. After all, the cognoscenti claim is that coaxial is the better digital connection.

M-Audio bundles some useful software, but the inclusion of a PC-only copy of Tony Hawk's Pro Skater 3 (the full version, even) merely illustrates the lack of digital surround-sound titles for the Mac. The drivers, on the other hand, are spectacular. A clean install of the updated software from the company's Web site reveals one of the

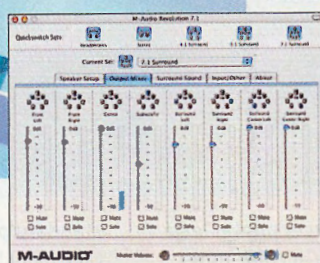
cleanest interfaces ever conceived for surround sound. You can tweak any level to suit yourself, or even choose from a pull-down of presets for the most common desktop speakers.

The PCI card seats easily enough and sports the aforementioned

coaxial digital-out, mic, and line-in jacks, as well as four analog speaker-out jacks. Depending on your speaker

setup, you may need to buy some Y-splitters and adapters.

We'd be happier if the Revolution 7.1 could automatically detect what type of device it's connected to and switch its output accordingly—but it can't. You have to do so manually in its control panel. We would also have appreciated more demos that could run on a Mac. The price is right, however, and the sound quality is astonishing. The Revolution 7.1 may require lots of cables that create lots of tangles, but it rewards you with lots of clean, immersive sound.—Frank O'Connor



The Revolution 7.1's interface software is deep, clear, and easy to use.

## AUDIO PRIMER

Confused by the sheer number of logos on the front of your audio equipment? Here's a breakdown of some of the more-common standards.

**Dolby Digital 5.1** This format is supported in most DVD movies and is the most widely used digital surround format, using five surround speakers. The .1 refers to the subwoofer.

**Dolby Digital EX** This format adds a rear-center surround channel to the Dolby Digital 5.1 standard and improves decoding.

**Dolby Pro Logic** This clever but fake surround effect redistributes a stereo signal to four or more speakers.

**SRS Surround** Very similar to Dolby Pro Logic, SRS creates a convincing surround effect from a stereo signal and distributes it among up to 5.1 channels.

**DTS** Similar to Dolby Digital 5.1, but allegedly superior, this format is found in many movies, although it uses higher bandwidth and more DVD space.

**THX** This high-quality LucasFilm standard is *not* a technology in itself. THX certification is a stamp of approval.



**COMPANY:** M-Audio  
**CONTACT:** 800-969-6434,  
www.m-audio.net  
**PRICE:** \$119.95, \$99 (street)

**REQUIREMENTS:** Mac OS 9.2.2 or later (10.1.5 or later required for Dolby Digital pass-through), available PCI slot

**GOOD NEWS:** Simple and well-specified solution for 3D surround sound from two to seven speakers.  
**BAD NEWS:** Limited applications for current Mac users. Digital out is coaxial only.

**MacAddict RATED**  
GREAT



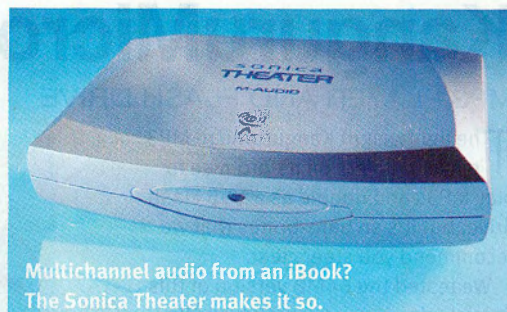
# Sonica Theater

## USB AUDIO INTERFACE

For those of us who are drooling over surround sound but whose Macs lack the requisite PCI slot for an audio card, M-Audio offers an external USB version of its Revolution 7.1 PCI audio card (see previous page). The Sonica Theater provides the same eight-channel analog-out, S/PDIF (Sony/Philips Digital Interface) RCA coaxial out, and 1/8-inch line in as the Revolution. Since our iBook-based home theater doesn't need the Revolution's mic-in port and higher-frequency (192KHz, compared to the Theater's 96KHz) audio, the Sonica Theater has all we need to reach the next level of wretched excess: in-bed theater.

With its limited input—one—this device is strictly for folks looking to consume the best audio possible,

not create it. Audio purists will love the Sonica Theater's true surround sound when playing surround-encoded discs—it sounds worlds better than the interpolated (SRS Circle Surround II) surround the device uses to enhance nonsurround audio. When we turned on SRS for nonsurround audio from games, music, and movies, the sound came out of all the connected speakers, but the reduced audio quality overshadowed any discernible separation. The Sonica Theater control app lets you tweak each speaker's level, overall volume, and so on. (Hint: If the audio comes out completely butchered, try a different speaker-setup preset—the 5.1 one rendered some music completely



Multichannel audio from an iBook? The Sonica Theater makes it so.

PHOTOGRAPH BY MARK MADEO

distorted but switching to 4.1 or 7.1 cleared it up.)

The Sonica Theater's usefulness is limited to DVD playback or iffy interpolation, and our 350MHz G3 experienced the occasional stutter during playback (our 600MHz iBook didn't). Nevertheless, surround sound rocks—especially when it's blasting your bedroom via an iBook, six or eight speakers, and this great little box.

—Niko Coucouvanis

### COMPANY: M-Audio

**CONTACT:** 800-969-6434,

[www.m-audio.net](http://www.m-audio.net)

**PRICE:** \$119.95, \$99.99 (street)

### REQUIREMENTS: USB-equipped

Mac, Mac OS 9.2.2 or later

(10.1.5 required for Dolby Digital pass-through)

### GOOD NEWS: Movies sound great in true surround sound.

External unit offers more cable-management options.

**BAD NEWS:** Limited uses for surround sound on a Mac.

Playback gets chunky on older Macs.

### MacAddict RATED



**GREAT**



BLUETOOTH  
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(Class I)

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# KanguruMicro MP3

## MP3 PLAYER AND FLASH DRIVE

The lightweight KanguruMicro MP3 player delivers on its promise to play MP3s and double as a USB Flash drive, but it's so bare-bones that we recommend you steer clear.

We tested the 64MB version of this lipstick-size, 1.6-ounce gadget. We plugged it into our Mac's USB port using its annoyingly stiff 6.75-inch extender cable, waited for the orange LED to turn green—indicating a full battery charge—and dragged MP3 files onto the NO\_NAME disk image that appeared on



The Kanguru MP3 player is cheap in all senses of the word.

tracks with a single jog dial. That's handy—but that's where the fun ends. First, there's no LCD display, so you have to memorize coded flashes of red, orange, and green LEDs to understand the KanguruMicro. Worse is the fact that there are no playlists for organizing your MP3 files—you have to scroll through your tunes one at a time. While this is a

minor annoyance for the 18 songs that fit on our 64MB model, it'd be a major pain on the 512MB version.

Unplugging the earbuds from the player switches the device into Flash drive mode, and plugging them back in restarts the player from the first song. Adding to this inconvenience, the earbud jack on our test model kept shorting out when it was jostled—we heard Aerosmith's "Dream On" about eight times too many during a bumpy bus ride.

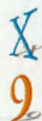
If you're looking for a keychain Flash drive and consider limited music-playing abilities a fun addition rather than an annoyance, you might be amused. However, there are cheaper Flash drives and much better MP3 players available. We suggest looking elsewhere.

—Narasu Rebbapragada

### We suggest looking elsewhere.

our desktop. No drivers were required, and the KanguruMicro worked just fine as a USB Flash drive.

You adjust the volume and select



**COMPANY:** Kanguru Solutions  
**CONTACT:** 888-526-4878, [www.kanguru.com](http://www.kanguru.com)  
**PRICE:** \$74.95 (64MB), \$99.95 (128MB), \$149.95 (256MB), \$249.95 (512MB)

**REQUIREMENTS:** USB-equipped Mac, Mac OS 8.6 or later

**GOOD NEWS:** Lightweight. Inexpensive.  
**BAD NEWS:** Lousy interface. No playlists.

**MacAddict RATED**  
LOUSY

PHOTOGRAPH BY MARK MADEO

# Sonicfire Pro 3.0

## SOUNDTRACK-CREATION SOFTWARE

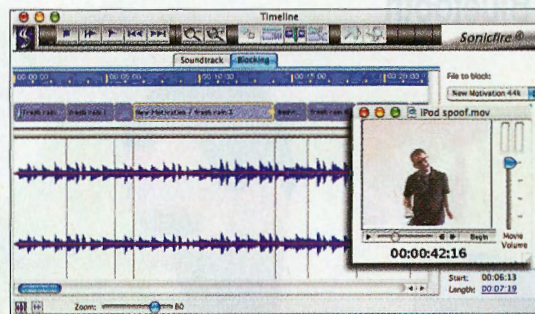
Creating a great soundtrack for your multimedia masterpiece—finding the right tune and making it fit the project's duration and timing—can be maddening. Sonicfire Pro addresses this challenge by providing libraries of royalty-free music and a handy block-based interface in which you can trim, stretch, and arrange clips to your liking.

Just to clarify, Sonicfire isn't a traditional audio editor—you can look at the waveforms, but you can't edit EQ or other settings. Soundtrack manipulation is supereasy, and—to our surprise—the provided CD-based music isn't *all* bad, although we're glad we can import our own audio.



Creating soundtracks is simple: You just export a reference movie from your video editor, then import it into Sonicfire Pro. The SmartSound Maestro file browser lets you peruse libraries of audio tracks that you then load, arrange, and sync to your movie with frame-level precision. You can also browse and purchase additional music libraries online in a variety of genres, including sound effects. Some of the online tracks we'd actually use, but the sound effects are overpriced at \$19.95 each.

When you're ready to export the soundtrack, you can pick from presets including Final Cut (Pro and Express),



Sonicfire Pro provides royalty-free tunes and breaks them into blocks you can resize to fit your needs.

Adobe Premiere, and iMovie. Sonicfire will deliver an AIFF or QuickTime file directly into the appropriate project or into your Movies folder.

If you're like us—lacking the time and talent to compose your own soundtracks—Sonicfire is a sound alternative (bad pun fully intended).

—Niko Coucouvanis



**COMPANY:** SmartSound Software  
**CONTACT:** 800-454-1900, [www.smartsound.com](http://www.smartsound.com)  
**PRICE:** \$299, \$99.95 (additional libraries)

**REQUIREMENTS:** Power Mac, Mac OS 9.1 or 10.1 or later, 30MB RAM, QuickTime 5.0.1 or later

**GOOD NEWS:** Makes syncing audio to video extremely easy.  
**BAD NEWS:** Provided music leans toward schmaltz. Expensive for casual use.

**MacAddict RATED**  
SOLID

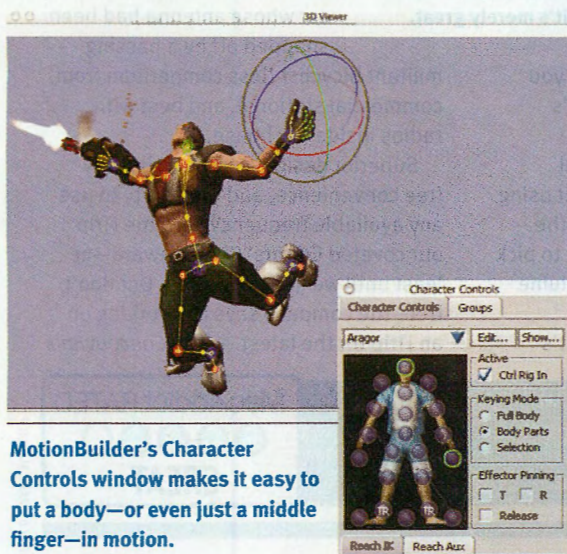


# MotionBuilder PE 4.02

## CHARACTER-ANIMATION SOFTWARE

You can get all the features of a \$4,000-plus animation application for just \$100. Sound too good to be true? It isn't. Kaydara's MotionBuilder Personal Edition, the company's flagship character-animation program, allows you to do amazing 3D-animation work and motion capture for an amazingly low price. The only catch is that the

And you can do all of this in real time. On our 733MHz Power Mac G4, we could fluidly scrub the timeline while changing the camera view—a combo that made adjusting our animation painless. When you're done animating, you can move your animation into any other application that supports the FBX format for interoperability—and



**MotionBuilder's Character Controls window makes it easy to put a body—or even just a middle finger—in motion.**

\$100 buys you a one-year, not-for-commercial-use license rather than the full, unfettered application. Once you learn the program, the full version (and, hopefully, wealth and fame) is a simple upgrade away.

MotionBuilder offers a full suite of animation tools, from bones to shaders,

that includes most of the major 3D apps, such as Alias|Wavefront's Maya, NewTek's LightWave 3D, and Discreet's 3ds max.

The biggest problem we have with MotionBuilder is its user interface. Even if you're familiar with 3D apps, it will take a lot of time to find your way around this program. First, the interface is not very Mac-like—it's got some Aqua bits, but they're pretty random, and the layout of controls and tools isn't very intuitive, so it takes plenty of

exploring to find the exact setting you want to change. Kaydara has done a decent job of offsetting these liabilities by providing some thorough online instructional videos, but MotionBuilder remains a difficult program to learn.

MotionBuilder's strength is, well, building motion. You can use it to create 3D content, but most dedicated modelers provide more object-creation options. Similarly, you can export your files to other applications for ray tracing if you don't like MotionBuilder's capable OpenGL renderer.

Despite its less-than-polished interface, MotionBuilder is incredibly powerful, and the PE version puts this prohibitively expensive technology within reach.—Rick Sanchez

**COMPANY:** Kaydara  
**CONTACT:** 514-842-8446, [www.kaydara.com](http://www.kaydara.com)  
**PRICE:** \$100 (Personal Edition), \$4,190 (commercial version)

**REQUIREMENTS:** Mac OS 10.1 or later, 256MB RAM, 300MB disk space, 16MB OpenGL graphics card

**GOOD NEWS:** Outstanding character-animation tools. Easy motion capture.  
**BAD NEWS:** Difficult learning curve. User interface not very Mac-like.

**MacAddict RATED**  
**GREAT**



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can't take  
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# iTrip

## FM TRANSMITTER FOR IPOD

Griffin Technology calls its iTrip FM transmitter the coolest iPod accessory in the world, and until someone comes up with, oh, say, an iPod-mounted light saber, we'll concur.

Like other FM broadcasters, the iTrip plays tunes from your iPod on a nearby FM receiver, such as the one in your car stereo. Unlike other FM broadcasters (such as the TuneCast; see our review below), which require batteries, iTrip draws power from the headphone jack on first- and second-generation iPods.

While other FM broadcasters typically provide a choice of four preset radio frequencies, iTrip's included software creates a playlist of FM frequencies ranging from 88.1 to 107.9, which you can navigate and activate the same way you play songs off a regular playlist on the iPod; it plays at 87.9 by default. A



**In a perfect world (or on a desert island), iTrip would be perfect—in our overcrowded world, it's merely great.**

blue LED status light blinks to tell you when the signal's locked in, but it's tough to see in bright sunlight.

Some caveats: Read the manual carefully, especially the part about using the pause-play button (that's not the one in the center of the jog wheel) to pick a station, and keep your iPod's volume between 40 and 80 percent.

iTrip itself works great—but that's



only half the battle. The airwaves are crowded. Trying to find a vacant frequency while driving around San Francisco was a stone drag. (You'll do better outside Tuba City, Arizona.) When we did find a free frequency, though, iTrip locked in and sounded as good as anything else on the radio. We found iTrip worked especially well in a car whose antenna had been snapped off by a passing

militant bicyclist (less competition from commercial stations), and best with radios inside our house.

Superior design, cord- and battery-free convenience, and the ability to use any available frequency earn the iTrip our coveted Editors' Choice award—at least until we get a new iPod. But don't fret—the company says it's working on an iTrip for the latest. —*Niko Coucouvanis*

9

**COMPANY:** Griffin Technology  
**CONTACT:** 615-399-7000,  
www.griffintechology.com

**PRICE:** \$35  
**REQUIREMENTS:** First- or second-generation iPod, FM radio receiver

**GOOD NEWS:** Perfect design. No batteries required. Uses any available radio frequency.  
**BAD NEWS:** Tough to use in a location with a crowded radio airspace. Not compatible with latest iPods (yet).

**MacAddict RATED**  
GREAT

# Super Dooper iPod Case

## IPOD CASE

Finally, equality for all iPod owners: Super Dooper cases come in variations to fit any iPod. We tried a Size 3, designed for the thin 30GB and thinner 10GB and 15GB third-generation iPods. Ballistic nylon and Velcro closures let us encase our iPods snugly and securely. The case's flip-up front provides easy access to the screen, controls, and a small earbud pouch. A top-access slit serves the earbud and remote ports and the Hold switch, but partially blocks the latter.



Lame name, ace case.

The manual touts docking a Super Dooper-encased third-generation iPod (with the case hiked up, Girl Scout-in-the-woods style), but we're glad the case also has a bottom-port access slot so we can use the FireWire cord directly. Slap the included sturdy swivel clip on the back, and this is one solid case. —*Niko Coucouvanis*

**COMPANY:** WaterField Designs  
**CONTACT:** 877-546-1040,  
www.sfbags.com

**PRICE:** \$40  
**REQUIREMENTS:** Any iPod  
(see company's Web site for sizing info)

**GOOD NEWS:** Tough ballistic nylon. Plush face padding. Great removable belt clip.  
**BAD NEWS:** Top-access slot obscures Hold switch. Earbud pouch is small. A less than super-duper name.

**MacAddict RATED**  
SOLID

# TuneCast

## FM TRANSMITTER FOR IPOD

Belkin's TuneCast is a capable transmitter, but like most such devices, it's limited to four FM frequencies—88.1, 88.3, 88.5, and 88.7—which you select via a handy switch on the device's side. Unfortunately, our local NPR affiliate overpowered TuneCast's signal on 88.5 and caused random interference in other channels as we drove about town. Bummer—but that's not wholly TuneCast's fault.

TuneCast runs on two AAA batteries, and its cord tucks neatly into its side for easy transport. This transmitter is an excellent match for the new dockable iPods—it looks great and works with any standard audio-out jack. Whether it'll work in your town depends on the local airwaves. —*Niko Coucouvanis*



**TuneCast rocks the house—or car.**

**COMPANY:** Belkin  
**CONTACT:** 310-898-1100,  
www.belkin.com

**PRICE:** \$39.99  
**REQUIREMENTS:** iPod or any music player with 1/8-inch audio jack, FM receiver

**GOOD NEWS:** Looks great. Sounds good.  
**BAD NEWS:** Limited to four radio frequencies.

**MacAddict RATED**  
SOLID

PHOTOGRAPHY BY MARK MADEO



# Moog Modular V

## SOFTWARE AUDIO SYNTHESIZER

While the current craze swirling around re-creating classic hardware synthesizers in software shows no signs of abating, certain legendary devices have eluded attempts at digital re-creation. One of the most daunting monsters of analog synthesizers, the venerable Moog Modular, has been brought to glorious life in Arturia Software's stunning Modular V. Not only is this one of the best-sounding software emulations of a specific piece of hardware we've ever heard, it also provides powers not present in the pioneering 1967 device (such as MIDI support)—and at a fraction of the cost.

Modular V runs as a stand-alone program or as a plug-in to MAS, VST, RTAS, and Pro Tools HTDM systems. The original Moog Modular hardware synths were monophonic, single-voice instruments, but Modular V can produce up to 64 simultaneous tones. This is especially impressive given the incredibly muscular sounds this software can induce your Mac to produce—a simple four-note chord built with some of its more massive sounds can blast the roof off your studio.

Modular's huge complement of synthesis modules includes filters, oscillators, voltage-controlled amplifiers (VCAs), and an excellent re-creation of a classic step sequencer that can help you compose trance, dance, and syncopated burlblings of the most

hypnotic order. Plus, if you've been seeking the legendary Moog bass sound, your

search is over—Modular V kicks.

The original Moog Modular was, well, modular. You could customize its specific configuration. Modular V contains many of the original modules and adds some welcome new ones, such as an integrated delay, chorus, and parametric equalizer, all created mimicking analog-style circuit design.

Getting the most out of the software requires some core understanding of *subtractive synthesis*, especially if you're designing sounds from scratch.



The Moog Modular V interface is true to the original analog hardware it emulates so well, with a patch bay (shown), sequencer, and keyboard.

This sound-creation process is far too complex to explain here, but a great way to start mastering it is to modify 1 or more of the 400 included preset sounds.

While its documentation leaves much to be desired—especially for a virtual device of this complexity—Moog Modular V looks and sounds fantastic. Hey, the virtual analog patch cables are even animated to swing out of the way as you drag your cursor over the controls. Even if you're not old enough to remember Moog artist Walter/Wendy Carlos, we highly recommend Moog Modular V.—David Biedny



**COMPANY:** Arturia  
**CONTACT:** [www.arturia.com](http://www.arturia.com)  
**PRICE:** \$329

**REQUIREMENTS:** 500MHz G3 (G4 recommended), Mac OS 9 or later, 128MB RAM

**GOOD NEWS:** Incredible sounds. Virtually every plug-in format provided. Many more voices and effects than in the original hardware.  
**BAD NEWS:** Weak documentation. Needs a fast processor for multiple voices or complex sounds.

MacAddict RATED  
GREAT

# PUPPY

Fingerprint Authentication

for

Mac OS X



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# Marine Aquarium 2

SCREEN SAVER

Wise men say that a bad day of fishing is better than a good day of work. With *Marine Aquarium* (a virtual-fish-tank screen saver) you get both. The fishing is vegan-style: Just admire your colorful aquatic buddies as they cavort against a realistic backdrop of coral and sand. And, yes, you can work while watching *Marine Aquarium*—just select its window mode. We, however, prefer screen-saver mode, which turns your

**We'd buy *Marine Aquarium* just because we think it's cool.**

whole screen into a gorgeous fish tank, complete with rising bubbles.

Version 2.0 adds five new fish, bringing the ichthyological total to 26—we're especially fond of the Blue Tang and Lionfish. The bad news is that

you can only have seven fish in the tank (on the screen) simultaneously. If you own a widescreen display (such as an Apple Cinema Display), you can have eight. However, they can be all of one breed or mixed—even randomized. Nifty touches include dynamic lighting, which consolidates a day's day and night lighting into a 30-minute cycle that you can shorten to as little as 3 minutes. This light cycling was enjoyable for a while, but we're glad the program also offered manual light settings we could set once and enjoy in perpetuity. You can adjust basic settings via System Preferences' Screen Effects pane or the application preferences dialog when *Aquarium* is running in window mode.



The Sqaurespot Anthias and Percula Clownfish are two of the 26 species of fish waiting for you in *Marine Aquarium*.

We know nobody really *needs* a screen saver: Modern computer displays are virtually immune to the dreaded monitor burn-in of old. No, we don't need it, but we'd buy *Marine Aquarium* just because we think it's cool—and because it drives our cat crazy.

—Niko Coucouvanis



**COMPANY:** Prolific Publishing  
**CONTACT:** [www.serenescreen.com](http://www.serenescreen.com)  
**PRICE:** \$19.95

**REQUIREMENTS:** 350MHz G3, Mac OS 9.x or 10.1.5 or later, 48MB RAM (128MB in OS X), 16-bit color

**GOOD NEWS:** Like a real fish tank without the fuss and muss. We could stare at it all day.  
**BAD NEWS:** Staring at it all day might get you fired. Limited number of fish onscreen at a time.

**MacAddict RATED**  
★★★★★  
**GREAT**

# LabelWriter 330 Turbo

LABEL PRINTER

Mac addicts have only one choice in dedicated label printers: Dymo's LabelWriters, compact thermal printers that use heat-sensitive labels. Dymo has lowered the price of its speedy LabelWriter 330 Turbo since our first review (*Reviews*, Oct./01, p49), but today's big news isn't a price drop, it's OS X–native software.

Your Mac's standard driver software allows any application to print to the LabelWriter, but to take advantage of special features (bar codes, counters, time-and-date stamps, and so forth), you need the included Dymo Label app.



**Dymo's LabelWriter 330 Turbo is ready to pow-wow with Mac OS X.**

The Classic version of Label remains unchanged, with a functional but clunky interface. The OS X version is more elegant. You can now edit content and adjust formatting directly on a template rather than through cumbersome dialogs. A new Smart Paste feature

prints multiple labels from the Clipboard or a file, and the new curved-text feature takes advantage of Dymo's nifty CD/DVD labels (2.25-inch diameter; \$11.95 for 160). The LabelWriter 330 Turbo isn't flawless, however: There's no Internet postage option; the software lacks integration with Apple's Address Book and Microsoft's Entourage; and the Mac software is missing several features available in the Windows version, such as Address Fixer, which checks addresses against the U.S. Postal Service's database if you're connected to the Internet.

The LabelWriter is convenient and reliable, and its new OS X software is far superior to the old Classic app. If only the Mac market share was large enough to entice Dymo to make the Mac software as capable as its Windows counterpart.—Owen W. Linzmayer



**COMPANY:** Dymo  
**CONTACT:** 800-426-7827 or 203-355-9000, [www.dymo.com](http://www.dymo.com)  
**PRICE:** \$209.99

**REQUIREMENTS:** USB- or serial-equipped Mac (only USB support in OS X), Mac OS 8.6 to 9.x or 10.1.5 or later

**GOOD NEWS:** Affordable. Great print quality and speed. Easy setup. Native OS X application.  
**BAD NEWS:** Missing Internet postage, PIM integration, Address Fixer, and other Windows-only features.

**MacAddict RATED**  
★★★★★  
**SOLID**



# QuickBooks Pro 5.0

## SMALL-BUSINESS ACCOUNTING SOFTWARE

For some time Intuit has alienated the Mac-addicted small-business crowd by ignoring Mac OS X, but the company has at last regained its senses and reaffirmed its commitment to the Mac: QuickBooks Pro 5 for Mac is here, and it works in both OS 9 and OS X. We're happy to see ol' familiar QuickBooks in all its new Aqua glory, but it's a rather underwhelming upgrade with nothing much in the way of new features—OK, the new Report Finder is handy, but there's not much else to get excited about.

Getting up to speed with QuickBooks Pro is a snap. You can seamlessly update your data from QuickBooks Pro 4, but only if you have version M12a—and if you're a QuickBooks user,

most normal bookkeeping elements of your small business, including the checking account, accounts payable, accounts receivable, invoicing, expense management, credit sales, inventory, time sheets, sales tax, and other essentials. You can even process the company payroll via the included copy of Aatrix Top Pay, which links to QuickBooks for its financial data. You also get a first-time-free tax-table update from Aatrix, but additional updates, state payroll reporting, and direct-deposit capabilities cost extra.

You can set up the basic books for a new company in short order using the convenient New Company Setup Assistant wizard, which helps you tailor QuickBooks Pro to your business. We do

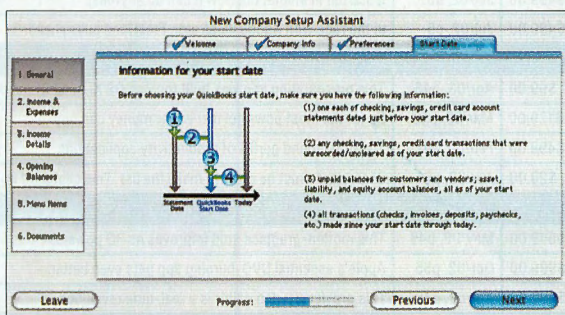
advise, however, that you peruse the documentation (a thorough 500-page tome) before you begin, or consult your accountant to ensure that you make the correct choices.

The new Report Finder feature allows you to easily find and customize the various financial reports you generate for your business. You can also now save your output in

PDF format in OS X, an output option shared by almost every other OS X app.

If you're starting from scratch, you'll want to take a close look at QuickBooks Pro 5. If you are using QuickBooks 4 and can survive in the Classic environment of OS X (and don't need to create PDF files), there's little to tempt you to shell out \$179.99 for the upgrade. However, if you prefer the stability and beauty of OS X, you can always write off the upgrade as a business expense.

—Gene Steinberg



**An easy question-and-answer wizard helps give QuickBooks Pro the information it needs to get your business in order.**

you probably do. Windows refugees (aka Switchers) can use Intuit's pricey conversion service (\$99 for 10-day turnaround, \$250 for 2-day) to get QuickBooks for Windows files into the Mac format. Alternately, you can download tools from Intuit's Web site and do the conversion yourself (for \$0). Either way, some data gets lost in the translation (see [www.quickbooks.com/support/index/win2mac/dataconverted.html](http://www.quickbooks.com/support/index/win2mac/dataconverted.html) for more info).

QuickBooks still deftly handles

**COMPANY:** Intuit

**CONTACT:** 800-446-8848 or 650-944-6000, [www.intuit.com](http://www.intuit.com)

**PRICE:** \$299.95, \$179.95 (upgrade)

**GOOD NEWS:** Relatively easy setup. Smooth learning curve. Powerful report feature. Decent performance.

**BAD NEWS:** Difficult cross-platform conversions. Not enough new features to justify upgrade price.

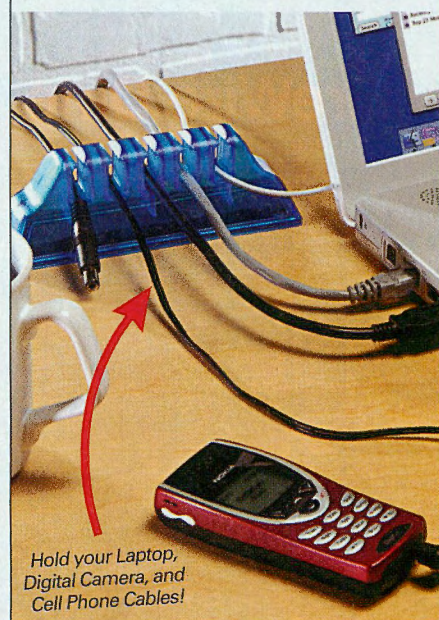
**REQUIREMENTS:** Power Mac, Mac OS 9.2.2 or 10.1.5 or 10.2.1 or later, 128MB RAM, 50MB disk space

**MacAddict RATED**  
  
**SOLID**

introducing the  
**Cable Caddy™**  
*Making the connection easy...*

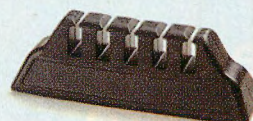
Constantly retrieving wires from behind your desk?

## THOSE DAYS ARE OVER!



Hold your Laptop, Digital Camera, and Cell Phone Cables!

The **Cable Caddy™** is the newest and most innovative organizer to keep those wires at your fingertips



Custom imprinting available.  
 Great promotional product!

## ORDER NOW AT

**cablecaddy.net**

Skytech Designs, LLC © CableCaddy™



# theHotList

THE BEST OF THE BEST FROM RECENT REVIEWS

**SHOPPING?**  
HERE'S WHAT WE  
RECOMMEND

## NEW THIS MONTH

### FireWire Dino

We thought we had seen it all, and then a FireWire 400 hub shows up in the form of a Godzilla action figure. As Reviews Editor Niko Coucouvanis said, "Hubzilla is way cool; just get one."



### 15GB iPod

This third-generation iPod inspired Editor in Chief Rik Myslewski to gush that it "redefines 'insanely great.'" Yeah, it may sound like Rik's lost his cold, hard objectivity—but he's right.

### Mercury Elite Pro

It's still early in the race to build the fastest FireWire 800 hard drive, but there's already a new leader: Other World Computing's Mercury Elite Pro. Rik again: "It's a great drive."

## SOFTWARE

### AUDIO

MOTU Digital Performer 3	\$795.00	Feb/02, p58	This pro-audio app has a great array of features.
Propellerhead Software Reason 2	\$399.00	Mar/03, p50	It's the best software-synth bargain available today.
Roxio Toast with Jam 5	\$189.95	Sep/02, p49	Burn CDs, MP3 CDs, DVDs, and VCDs, and edit audio.

### GAMES

Ambrosia Software Escape Velocity: Nova	\$30.00	Sep/02, p48	Enjoy the perverse thrill of galactic domination.
Aspyr Jedi Knight II: Jedi Outcast	\$49.95	Feb/03, p37	Fantastic gameplay with both weapons and The Force.
Aspyr NASCAR Racing 2002 Season	\$39.99	May/03, p57	Realistic NASCAR racing on a Mac? Believe it.
Aspyr The Sims Unleashed	\$29.95	May/03, p58	Pixel-pets abound in the best Sims expansion pack yet.
MacPlay No One Lives Forever	\$49.99	Mar/03, p49	A beautiful spy, sly foes, nifty gadgets, fast action—nice.
MacSoft Max Payne	\$40.00	Dec/02, p42	Max seeks revenge—and gets plenty of it in this FPS.

### GRAPHICS & LAYOUT

Adobe InDesign 2.0	\$699.00	May/02, p50	Look out, Quark—Adobe's rival layout tool kicks butt.
Adobe Photoshop 7	\$609.00	Jul/02, p46	Picture-perfect pixel pusher moves to Mac OS X.
Adobe Photoshop Elements 2	\$99.00	Dec/02, p40	This has most of Photoshop's power for \$500 less.
FontLab 4.5.2	\$549.00	May/03, p53	The font editor all type geeks have been waiting for.
Macromedia Dreamweaver MX	\$399.00	Sep/02, p44	Our favorite Web-design tool gets a strong upgrade.
Macromedia Flash MX	\$499.00	Jul/02, p51	It started in animation; now it can do anything.
Macromedia FreeHand MX	\$499.00	Jul/02, p5	In the race with Adobe Illustrator, FreeHand pulls ahead.

### PRODUCTIVITY & UTILITIES

Apple Keynote	\$99.00	Apr/03, p48	This presentation app was built for Mac OS X—and it shows.
Bare Bones Software BBEEdit 7.0.1	\$179.00	Mar/03, p52	By far the most powerful text editor money can buy.
Microsoft Office v. X	\$499.00	Feb/02, p42	The 800-pound gorilla of productivity applications.
Script Software CopyPaste-X 1.5.1	\$20.00	Apr/03, p61	Shareware must be great to make the list. This clipboard is.

### VIDEO & ANIMATION

Adobe After Effects 5.5	\$649.00	May/02, p49	This motion-graphics stud improves its 3D powers.
Apple DVD Studio Pro 1.5	\$999.00	Oct/02, p55	Apple's essential DVD-burning app gets even better.
Apple Final Cut Pro 3	\$999.00	Apr/02, p45	This pro-level video editor is a real-time revelation.

## HARDWARE

### ACCESSORIES

CharisMac FireWire Dino	\$69.95	Jul/03, p55	Run for your lives! It's Godzilla! It's a FireWire 400 hub!
Dr. Bott's extendAIR Direct	\$149.95	May/03, p51	Make AirPort Extreme's range noticeably more extreme.
MacWireless Power Over Ethernet	\$29.98	Jun/03, p61	Mount an AirPort Base Station 250 feet from AC power.
XtremeMac UFO	\$129.95	May/03, p59	If you own a G4 iMac, you gotta get this way-cool hub.

### AUDIO

Apple 15GB iPod	\$399.00	Jul/03, p44	The world's greatest MP3 player gets smaller and cooler.
Digidesign Mbox	\$495.00	May/02, p59	This audio interface is a traveling musician's delight.

### DIGITAL CAMERAS

Canon PowerShot S230 Digital Elph	\$399.00	Mar/03, p48	A great 3.2-megapixel camera in a tiny, low-cost package.
Nikon Coolpix 3100	\$340.00	May/03, p43	The best point-and-shoot digicam we've seen yet.
Olympus C-4000 Zoom	\$499.00	Jan/03, p52	Great image quality, 4 megapixels, and versatile controls.

### DISPLAYS

Apple Cinema HD Display	\$1,999.00	Aug/02, p40	This 23-inch, 1,920-by-1,200-pixel beauty inspires lust.
Formac gallery 2010 Platinum	\$1,399.00	Jan/03, p47	Bright, fast, huge—and it costs only \$.0007 per pixel.

### PRINTERS

Brother HL-1870N	\$699.00	Aug/02, p45	Need a sturdy laser printer? This one's a workhorse.
Epson Stylus Photo 2200	\$699.00	Oct/02, p42	The most stunning photo printer we've ever tested.

### SCANNERS

Canon CanoScan LiDE 30	\$99.00	Nov/02, p52	This entry-level scanner gets the job done inexpensively.
Epson Perfection Photo	\$399.00	Oct/02, p48	This sophisticated scanner also handles transparencies.

### STORAGE

LaCie d2 200GB FireWire 800	\$469.00	Jun/03, p47	FireWire 800 speed meets solid-as-a-rock construction.
Maxtor Personal Storage 5000XT	\$399.99	Feb/03, p44	Solid construction, push-button backup, and 250GB.
OWC Mercury Elite Pro	\$379.99	Jul/03, p53	This 180GB FireWire 800 drive outpaces its competition.

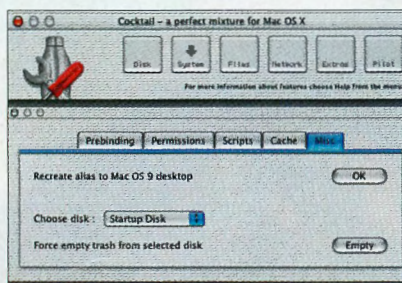


**Immerse yourself in the lives of your Sims.**



GOT A QUESTION?  
NEED ADVICE?

# ask us WE CAN HELP



This alcohol-free Cocktail empties your Trash and won't give you a hangover.

## RECALCITRANT FOLDERS

Why can't I trash certain folders?

The Trash is actually just a folder, and like other folders, it has permissions and privileges that sometimes stop you from tossing certain files. When files and folders just won't go away, try



Dicom's Cocktail (free, [www2.dicom.se](http://www2.dicom.se) /cocktail), which forces the Trash to empty.

## OUTING STUCK CDS

How can I remove a CD that's stuck in my Mac?

Method 1: Hold down the mouse button while your Mac starts up to force the CD drive to spit it out. Method 2: Boot into Open Firmware by holding down the Command-Option-O-F keys at startup. When the Open Firmware text screen appears, type  `eject cd` and press Return—the CD will pop out. Type `reset-all` to reboot your Mac.

## REMOVING .DS\_STORE FILES

How important are the .DS\_Store files in Mac OS X?

Not very. In theory, .DS\_Store files keep track of icon positions in a folder. In reality, deleting them does nothing to icon placement. If you would like to delete them, say, for burning an MP3 CD without extraneous files that might confuse a standalone player, the cleanest way is to use the free utility De\_DDS ([http://extraneous.us/download/De\\_DDS.tgz](http://extraneous.us/download/De_DDS.tgz)). Just drag a folder onto De\_DDS, and it will delete any .DS\_Store files in the folder.



## WHEN MAIL MUST MOVE

Can I store my Mac OS X Mail on an external drive?

Yes. First, launch the Terminal. Since Mac OS X's Mail application can't follow standard aliases to a new location, you need to create a kind of superalias called a *symbolic link*. Copy your Mail directory to the external drive and delete the original Mail folder. Then fire up the

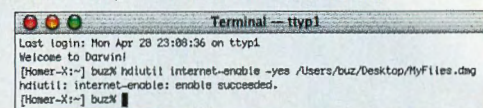
Terminal (Applications > Utilities) and type the following command:  
`ln -s path/to/new location/Mail (no space) /Users/user name/Library`  
This will put what appears to be an alias—but is actually a symbolic link—into your Library folder.

**TIP:** To quickly get the exact path to your new Mail folder location, drag the Mail folder from its new location into the Terminal window after you have already typed `ln -s`.

## INTERNET DISK IMAGES

How do you create an Internet disk image?

With Mac OS 10.2.3, Apple introduced the Internet disk image, which works like the regular disk image for downloading files from your Web or FTP site, but with



Just type one simple command line, and you'll enable a neat-and-tidy Internet disk image.

one exception: It deletes itself after mounting and copying files to your Mac. (Regular disk images leave a messy trail of used wrappers.) To create an Internet disk image, first create a normal disk image file by using Disk Copy (Applications > Utilities). Then open the Terminal (Applications > Utilities) and use the following command to convert your disk-image file into an Internet disk image: `hdiutil internet-enable -yes (space) /path to disk image.dmg`

# quick answers TO QUICK QUESTIONS

## SAFARI SYNC

How can I move my Safari bookmarks from one Mac to another?

Just copy the Bookmarks.plist stored in your Library > Safari folder from one Mac to the other.

## DVD STILLS

How do you capture still images from a DVD in Mac OS X?

Use DigitallyObsessed's free utility, DVD Capture 2.0 ([www.digitallyobsessed.com](http://www.digitallyobsessed.com)), which works within Apple's DVD Player 3 to let you take stills from running movies. You need Jaguar to run it.



## THE INTERNAL BOOT

How can I force my Mac to boot from the system software on an internal hard drive instead of on a CD?

Just holding down the D key during startup should do the trick.

## BIGGER MOUSE CURSORS

Is there a way to make my cursor larger?

In Mac OS 9, use RJ Cooper's Biggy-Light (\$29, <http://rjcooper.com>). In Mac OS X, use Unsanity's Mighty Mouse (\$10, [www.unsanity.com](http://www.unsanity.com)), which allows you to do all kinds of customizations.



Meet the Yao Ming of cursors.





No whining—  
anyone  
can do this!



It'll take some  
effort, but you  
can do it.



This stuff's  
for the pros.

# UNIX UNIVERSITY

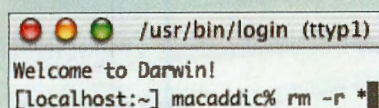


## COMMAND OF DEATH

How much damage can one command do?

A lot. For example, the remove command, **rm**, is very dangerous. Used incorrectly, however, it can exterminate your data or extinguish your Web server. Here are some variations on the evil.

**Warning:** Back up your Mac before using these commands.



Use **rm** with caution.

**rm** This command deletes files and folders. Unix has no undelete, so when

you **rm** a file, it's gone, baby.

**rm \*** This infinitely more dangerous variation of the **rm** command uses the asterisk (\*) wild card, which substitutes for any and all characters. The command **rm \*** would delete any file in the current directory.

**rm -R \*** This is the most dangerous command in the Unix universe. The **-R** stands for recursive, which means it applies the remove command to both a directory and all its subdirectories to delete everything permanently. This harmless little combo *will* (actually *did*, we're embarrassed to admit) irrevocably delete the contents of the home directory.



Preview EPS files in Mac OS X.

## EPS PREVIEW IN MAC OS X

How can I preview an EPS file in Mac OS X?

Thomas Kiffe's MacGhostView (\$20, [www.kiffe.com](http://www.kiffe.com)) can render any raw PostScript file to the screen as well

as display the contents of any EPS (Encapsulated PostScript) file.

This is a great way to get a quick preview of an EPS file without opening it.



**Submit** technical questions or helpful tips directly via email ([askus@macaddict.com](mailto:askus@macaddict.com)) or c/o MacAddict, 150 North Hill Dr., Brisbane, CA 94005.

Six years of handling tech support for Apple, Power Computing, and a Texas school district have given Buz Zoller Mac superpowers.

## VCD VIEWING

How can I play Video CDs on my Mac?

Use MacVCD X (\$19.95, [www.mireth.com/pub/mxme.html](http://www.mireth.com/pub/mxme.html)), available for both Mac OS 9 and Mac OS X.

## WHERE CAN I GET INFO?

How can I learn everything about a used Mac I inherited?

Get MacTracker, by Ian Page (free, <http://www.mactracker.ca>), which contains a wealth of info—from tech specs to original price to startup chime—about every Mac ever made.

# ThisMonth

Welcome to the Webatorium! Watch this space for oodles and oodles of compelling content, resuming your way 24/7 'baby! If we had anything to say, or if the text in this screenshot was going to be big enough to read in print, we'd dang well say something here.

Instead, we'll just fill the white space with words made of typed characters that'll illustrate how a right-aligned image stays put while the text flows magically around it. Then we'll resort to good old filler text lest our brains implode. Dang, that's a tall image, notice how we've apparently painted ourselves into a proverbial corner, having run out



## 60 Build Your Own Web Site

Why run with the herd, using your ISP's or .Mac's Web page templates to create a cookie-cutter site? Be unique. Be original. Do it yourself. We show you how.



## 64 Control Your Mac with Your Voice

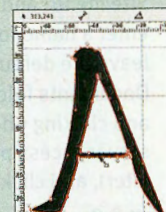
Give your fingers and wrist a rest. We show you how you can get your Mac to perform everyday routine tasks with the mere sound of your voice.

## 66 Broadcast Your Own News Feed

Keep them informed. Whether you have a personal Web site, a blog, or a commercial Web presence, we show you how to create news feeds that'll display your headlines in any news ticker app.

## 68 Design Your Own Font

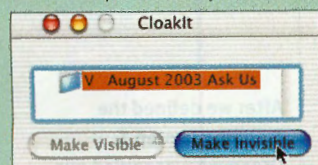
You've always thought it would be cool to have a font in your own handwriting. Now you can. Create a handwriting typeface lickety-split or spend time designing a stylized one—the choice is yours.



## INVISIBLE VISIBLES

How can I make Mac OS X folders invisible to keep them away from prying eyes?

Use Citrus Software's CloakIT (\$9.95, [www.citrussoftware.com](http://www.citrussoftware.com)), which can make files or folders disappear from view and even password-protect them.



Now you see it, now you don't.





Tired of .Mac's limitations on Web-page design, but clueless when it comes to code? You can quickly build your own site—code-free—with Dreamweaver.

# Build Your Own Web Site

by Niko Coucouvanis



## WHAT YOU NEED

- Dreamweaver MX (\$399 or free trial version; [www.macromedia.com](http://www.macromedia.com))
- FTP client, such as Transmit (\$24.95, [www.panic.com](http://www.panic.com)) or Dreamweaver
- Web host

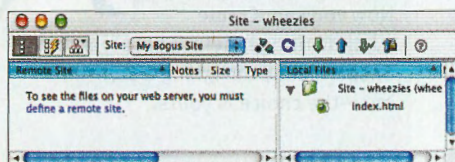
So you want a Web page. It's 2003, for crying out loud—nobody gives a fart about the Internet since the great dot-bomb of '01. But they'll be back, and this time you'll be there ahead of the pack. Sure, you *could* just fill in the blanks on your .Mac homepage or click HomePage in iPhoto (or just about any modern word- or image-processing app) to autogenerate

one, but where's the fun in that? Shouldn't your Web page symbolize your individuality and belief in personal freedom? We say, "Hell, yeah!" We even show you the way.

You've always wanted to flaunt your fluff 'n' stuff electronically to the masses, but .Mac doesn't cut it for you. Here, we instruct you on how to create a basic home page, complete with a title graphic, text, a photo, and navigational links to your unknown treasures within. We demonstrate how to Web-optimize photos and build a custom-made photo-gallery page. And don't worry—we also tell you how to get everything up on your hosted Web space.



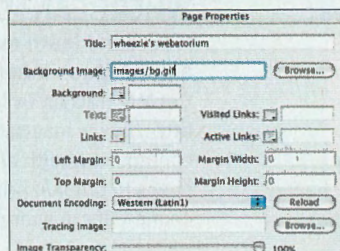
**1 Make the Map** Launch Dreamweaver MX. The program opens a blank document—save the page as *index.html* in Library > WebServer > Documents. Then tell Dreamweaver to store your pending images and HTML files in this same Documents folder; select New Site from the Site menu; and in the resulting dialog, click the Basic tab and enter a name for your site in the field. Click Next to continue, leave the default setting, and click Next again. Select the same Documents folder by clicking the folder icon, navigating to it, and clicking Choose. Click Next again, select None from the server access pop-up menu (we'll deal with uploading files later), and click Next to see a summary of your site's settings.



Click Done to seal the deal.

Stash files in Library > WebServer > Documents, and you can preview your site from your Mac's built-in Web server.

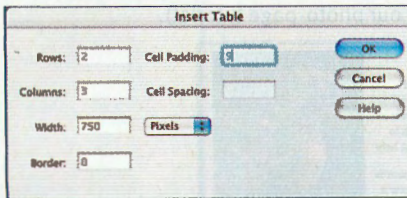
**2 Set the Page** From the Modify menu, select Page Properties. In the dialog, type a name for your page in the Title field (this is what your visitors will see). If you want to display a graphic in the background, click the Browse button next to the Background Image field, navigate to an image, and click Choose. Dreamweaver offers to copy the file to the Documents folder—click Yes, and in the resulting dialog, click New Folder, name the folder *images*, and click Create, then Save. For a solid-color background, click the Background swatch and choose a color from the palette. If you want to change text or link colors, click the appropriate swatch and choose a color. Then click OK.



After we defined the mapping in step 1, Dreamweaver copied our background graphic to our storage folder.

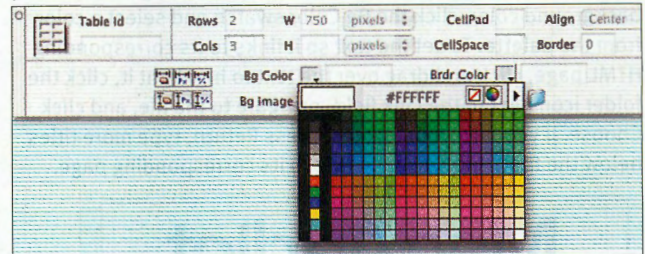


**3 Set the Table** HTML tables allow you to arrange images and words into rows and columns, and are the best way to design pages that'll look the same across different Web browsers, operating systems, and platforms. Thankfully, Dreamweaver can build the tables for you; if you're a budding propellerhead, check out our HTML cheat sheet, "Know Thy Code," on the Disc. In Dreamweaver, select the Common tab and click the insert table icon in the Insert window. In the resulting dialog, type 2 in the Rows field, 3 in the Columns field, and 750 in the Width field. Select Pixels from the pop-up menu next to Width. To create breathing room between cells, type 9 in the Cell Padding field, and then click OK to generate the table.



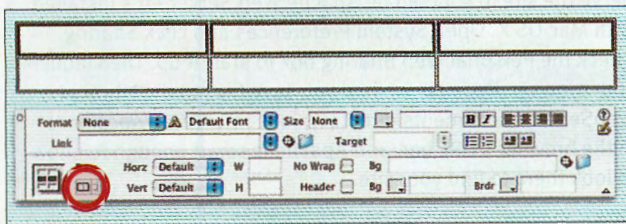
Trust us, creating HTML tables in Dreamweaver is much easier than coding them by hand.

**4 Color the Cells** To make your page easy to read, choose a background color for the table's cells. In the Properties window, click the Bg Color swatch and use the eyedropper to select an easy-on-the-eyes color from the palette—we chose white to keep things looking clean. To choose a background color that complements your background graphic (if you're displaying one), click the Bg Color swatch and use the eyedropper to select any desired color in your document window.



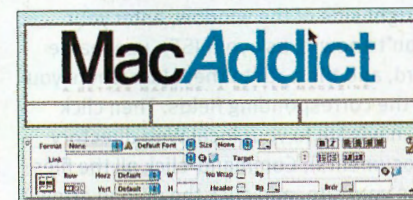
Choose a solid color for your table's background for better readability—especially if you have a background graphic.

**5 Merge Cells** Since a home page is all about self-aggrandizement, a nice big logo or text title that loudly announces your arrival to the Web world is par for the course. However, one cell is too puny for such grandiosity, so merge the top row's three cells so that your title or image runs the width of the table. Click the top-left cell to select it, hold down the Shift key, click twice in the adjacent cell, and then click the far-right cell to select the entire row (the borders will appear in bold). Then click the merge cells icon under Row in the Properties window.



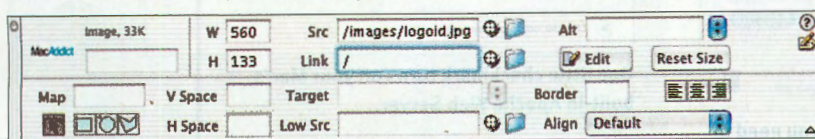
You can easily merge cells in HTML tables with the click of a button—a task that used to take days to code by hand.

**6 Insert a Title** If you've got a logo, click the big cell, and then click the image button in the Insert window. In the resulting window, navigate to and select your logo graphic and click Choose. Click Yes in the subsequent dialog. In the next, save the graphic into your images folder (create this in the Documents folder if it doesn't already exist). The cell expands to hold your logo—drag any bounding-box corner if you need to scale it. If you want a text title, click the text-color swatch in the Properties window and choose a color. Then select a font from the font pop-up menu, click the bold button if you want a heavier line, select a number from the Size pop-up, and type a title. To center your logo or title in the cell, click the align-center button. Then save your file.



To title your page, insert a graphic logo or type text in the top cell and then center it.

**7 Show Them the Way Home** Now that you've got the basis for your home page, use it as a template for your site's subpages. First, create a link for your logo or title so that when surfers click it, they'll be brought back from any page within your site to your home page. Click your logo to select it, or highlight your title text. In the Properties window, type a backslash (/) in the Link field, which tells the Web browser to go to the site's root-level index page. Then select Save As from the File menu, enter a name for the next page you want to create (photos.html, bio.html, or what have you), and save it into the Documents folder (save a backup too). Repeat for any additional pages.



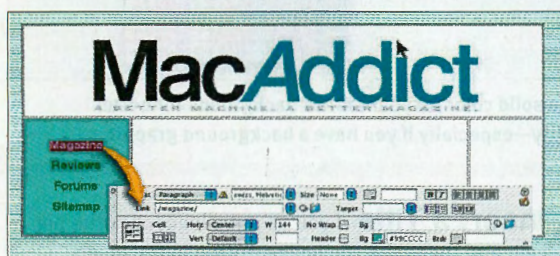
Typing a backslash in the Link field sets a link back to your main index.html page.

## HIJACK YOUR .MAC HOMEPAGE

But wait, you say—I use Apple's .Mac for my Web space. Can I have my righteous Dreamweaver creation appear as my .Mac home page? Sure. Just mount your iDisk by selecting iDisk from the Finder's Go menu. Then deposit all of your HTML and image files in your iDisk's Sites folder. That's it—really. Now anyone can see your handiwork by logging onto your .Mac home page.

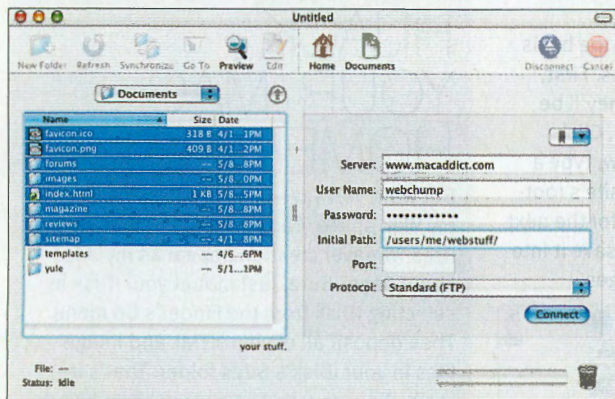


**8 Make Menu Links** If you want people to see your subpages, create menu links on your home page to lead them deeper into your site. Go back to your home page, click the bottom left cell, then select Center from the Horz pop-up menu in the Properties Inspector. Then click the text-color swatch, choose a color, select a font from the Default Font pop-up menu, select a size from the Size pop-up, and type a title that describes your first subpage (such as Photo Gallery or About Me). If you want to change the cell's background color, click the Bg Color swatch and select a color from the palette. To set the text so it links to its corresponding HTML page, click and drag over the text to highlight it, click the folder icon next to the Link field, navigate to the file, and click Choose. If you have more pages, press Return, type more titles below the first, and link each title to its corresponding page.



Type titles for your site's subpages in the bottom left cell to create a menu, and then link them to their HTML pages.

**10 Leave the Nest** Once you're finished, upload your site to your Web host for all the world to see. (If you're a .Mac subscriber, see "Hijack Your .Mac Homepage," p61.) Though Dreamweaver lets you upload directly from it, Transmit is easier to use (if you're using Dreamweaver, select Edit Sites from the Site menu and apply our instruction to the appropriate panel). Launch Transmit. In the right side of the window, enter your server address (if you don't know it, ask your ISP), user name (for the server), password, and the path to the folder where you want to put your stuff in the corresponding fields. Then click Connect. In the left side, navigate to your local Web directory (Library > WebServer > Documents), Command-click all the files and folders that comprise your site, and click the upload arrow button to send them off. Then fire up your browser and admire.



Your personal information will vary, but this is where you need to enter it to upload files.

**9 Fill 'Er Up** Now let's add a pretty picture and some compelling content. To add an image (see "Optimize Photos," next page, for important image-compression info), click the bottom center cell, and click the image button. In the resulting dialog, navigate to your desired file, click Choose, and direct Dreamweaver to copy it into the images folder. Feel free to resize the image and change its alignment within the cell (we right-aligned ours and then typed 5 in the H Space field to move the image 5 pixels away from the right). To add text, press your keyboard's right-arrow key to deselect the image, and then start typing—the text will flow within the same cell. Then apply your page design and linking knowledge to your subpages (see "Build Your Own Photo Gallery," next page, for our photo-page tutorial).

Welcome to the Webatorium!

Watch this space for oodles and oodles of compelling content, streaming your way 24/7 baby! If we had anything to say, or if the text in this screenshot was going to be big enough to read in print, we'd dare well say something here.

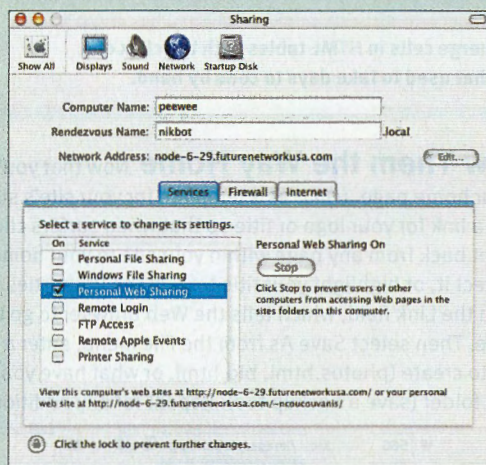
Instead, we'll just fill the white space with words made of typed characters that'll illustrate how a right-aligned image stays put while the text flows magically around it. Then we'll resort to good old filler text lest our brains implode. Dmg, that's a tall image, notice how we've apparently painted ourselves into a proverbial corner, having run out of words bearing any semblance of relevance to anything really. Given that, we can't really jack up the font size to fill the space, because that'd give away the dirty little secret. Not that we have nothing to say--no, contrary--that no cognizant humans really read websites anyway, it's just a bunch of spambots and spiders trolling for email addresses to bombard with spam.



Paragraph text flows smoothly around a right-aligned image—pretty slick, eh?

## SERVE YOURSELF

As you build a site, check it out in a browser from time to time. Don't settle for Dreamweaver's Preview In Browser function. Serve the site to yourself on Apache Web Server—it's installed with Mac OS X. Open System Preferences and click Sharing. Check the Personal Web Sharing box to start it up. Then launch your browser. Because we had you save files to the Library > WebServer > Documents directory, just enter <http://localhost> in the browser's URL bar, and Apache is smart enough to know to look there to find your site.



One little checkmark turns on your Mac's built-in Apache Web Server.







# Control Your Mac with Your Voice

by Kris Fong

EASY

## WHAT YOU NEED

- Mac OS X
- Microphone, built-in or external



PHOTOGRAPH BY MARK MADEO

**Feeling powerless? Boss around your Mac—you may be surprised to find how often it'll obey.**

We humans are a bossy breed. When it comes to getting what we want—whether it's combo meal number 5 with pickles and onions on the side, green M&M's, or *MacAddict* Disc sleeves—we voice our demands and expect to get what we want (well, some of the time). If you thrive on barking out orders, you can apply your doggedness to your relationship with your Mac.

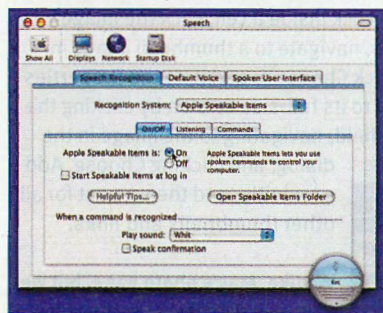
Plenty of you already know that Apple built speech technology into earlier versions of the Mac OS so that users could verbally control some of their Macs' actions. But few have tried it for fear

of frustration or failure. Thankfully, Apple's Mac OS X Speech Recognition is easy to get up and running, and it doesn't require that you train it to understand spoken commands. It does, however, require some patience to perfect your speech delivery so your Mac can comprehend what you're saying.

If your mousing hand or fingers need a little rest—or if you just want to impress your sci-fi geek friends—here's how to set up your Mac for speech recognition and how to create your own custom commands. We used Mac OS 10.2—if you're using an earlier OS, it's easy to apply our instructions to your OS.

## 1 Enable Speech Recognition

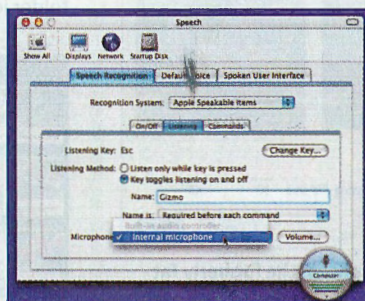
You've gotta turn it on to make it work. Open System Preferences and click Speech to display its options. Click the Speech Recognition tab, and then click the On/Off tab. Select the On radio button to enable Speech Recognition; a round, floating feedback window appears on your desktop. This window allows you to monitor the volume levels picked up by your microphone and displays text feedback when it understands a spoken command.



**Just click the On radio button to turn on Speech Recognition. A float-above-everything, round feedback window lets you know it's running.**

## 2 Have It Your Way

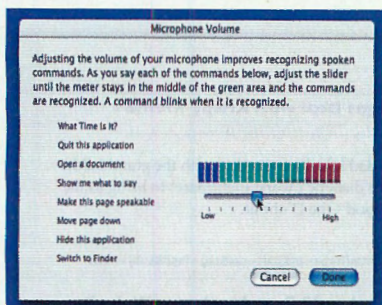
Click the Listening tab and choose whether you want your Mac to respond to commands only when you hold down a key and speak (select Listen Only While Key Is Pressed) or anytime its listening mode is turned on (select Key Toggles Listening On And Off). We picked the latter so we could speak without pressing anything. If you do the same, type a name for your computer in the Name field (not required for key-press listening)—speak this name to alert your Mac of an impending voice command. From the Name Is pop-up, select whether you want to preface each command with your computer's name, have it as an option, or require it after a certain amount of time lapses between commands. To avoid inadvertently commanding your Mac to do something when you're, say, talking to your cat, select Required Before Each Command. To change the default activation key (Escape), click Change Key. In the dialog that appears, use your keyboard to select any listed key and click OK. Then select your microphone input from the Microphone pop-up menu.



**We selected our built-in mic from the Microphone pop-up window—note the feedback window's active volume-bar display.**



**3 Control the Volume** To avoid problems, gauge your mic input volume: Activate listening as determined by your Listening Method choice, and then say anything that isn't a command, such as your name. Watch the feedback window's colored bars—they should display green as you speak. If your volume level is too low (blue bar) or too high (red bar), click Volume. In the resulting window, speak one of the commands listed and adjust the volume slider so that the levels are green. The command will blink if your Mac understands what you said. Then click Done, and you're ready to go.



For best results, adjust the volume slider while speaking until your vocalizations keep the bars in the green.

**4 Command Your Mac** Your Mac comes with a slew of preprogrammed commands. To see a complete list, click the On/Off tab and click Open Speakable Items Folder. To test one out, ask your Mac "What time is it?" in your normal voice (don't forget to say your Mac's name first if you chose that option). If your Mac understands, your question will appear above the feedback window and your Mac will tell you the time. Turn down your stereo, TV, and so on when speaking—background noise can cause your Mac to perform unwanted commands (something in Jay Leno's monologue made our Mac suddenly want to log us out). If you don't want to



remember exact command phrases, click the Commands tab and uncheck Require Exact Wording Of Speakable Item Command Names; this allows you to give voice commands that are similar to the real deal (such as "Gimme the time"—yes, this does work).

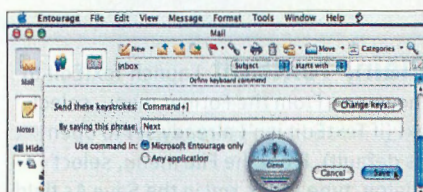
If your Mac understands your orders, it displays your command or question above the feedback window.

**5 Create Custom Launching Orders** With Apple's presets, you can perform mundane tasks such as emptying the Trash, creating new folders, getting mail, saving files, and more—including getting your Mac to tell you a knock-knock joke (though ours failed to deliver a punch line 50 percent of the time). But for ultimate control, create your own commands. To create one that launches a specific file, folder, Web site, or app, make an alias of the item (Command-L) and drag it into your Speakable Items folder (say "Show me what to say" to open it). Then rename the alias as a command by typing *Open* followed by the item name. For example, we renamed our iTunes alias *Open iTunes*. Wait about 15 to 20 seconds for your Mac to settle in with the new command, and then test it by speaking it. Repeat for any other app, file, or folder you want to open verbally.



If you want to open any file, folder, URL, or app verbally, stick an alias of the item into the Speakable Items folder, and rename the file with its spoken command.

**6 Customize Menu Commands** Although the presets provide some common menu commands to copy, paste, hide apps, and more, there are other tasks we wanted to perform without repetitive keystrokes or mouse clicks. No problem—we can create custom voice commands for just about any menu command. To do this, launch an app and pick a menu command (we chose Microsoft Entourage's Next command so we could step through email using our voice). Then tell your Mac, "Define a keyboard command." A dialog opens, asking for a key combination—press the keys that correspond to your menu command (we pressed Command-I), and click OK. In the underlying dialog, type an appropriate verbal command for your menu item in the By Saying This Phrase field.



Because we were tired of clicking through each email entry, we created a voice command for Entourage's Next command.

Then choose to use the command either within the specific app or systemwide, and click Save. Speak the command to test it out. Then repeat for other commands.



Kris Fong wishes that people were as compliant with her every demand as her Mac is.

## TIPS FOR TALKERS

**Step Away from the Mic** Unlike recording apps, Speech Recognition works best when you're about 2 feet away from your mic.

**Speak Normally** Don't shout or speak like a robot when delivering commands. Speak like you would in a conversation with someone.

**Pause After Getting Your Mac's Attention** When addressing your Mac by name, wait one second before delivering your command.



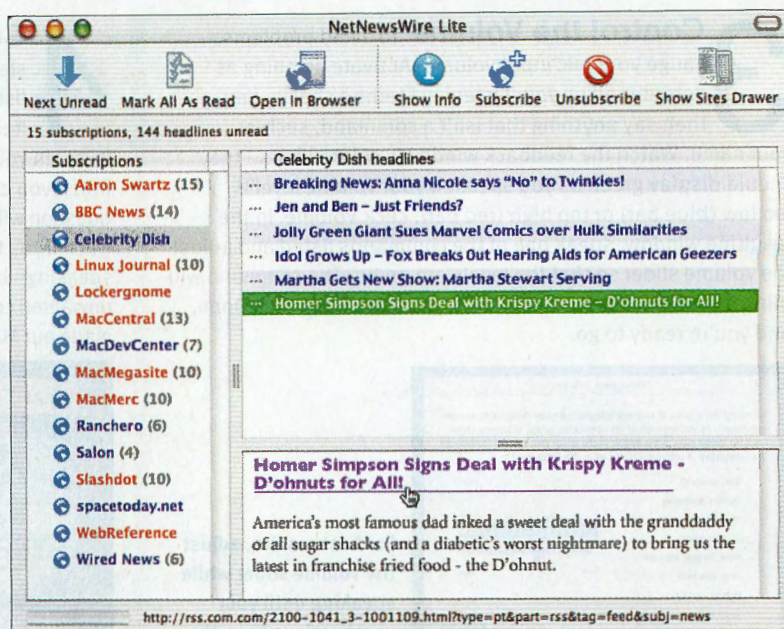
# Broadcast Your Own News Feed

by Mary E. Tyler



## WHAT YOU NEED

- TextEdit (part of Mac OS X)
- Web site
- NetNewsWire Lite (free, <http://ranchero.com/netnewswire>)



Got something to say (and readers who give a darn)? Broadcast your Web site headlines by creating a news feed.

You've always been somewhat of a gossip king or queen—and at some point you decided to take your knack for dishin' it to the next level in the form of a celebrity gossip site. Now that you've got some pretty good Web traffic, you're looking for a way to alert your reader faithful whenever you post juicy new stories. Rather than spam your mailing list, why not provide a news feed?



Most of you have probably seen a news feed—it's the ticker in AOL Instant Messenger (AIM), the scrolling text that squishes the picture on ESPN, and the latest-posts listing on Slashdot.org. Though a news feed looks like a dynamic text

stream, it actually works more like an MP3, where the music is all there in the file and the player streams it to your ears. With a news feed, the text is contained in a file and a news-ticker app broadcasts it to your eyeballs.

Providing a news feed for your site is really simple—Really Simple Syndication, that is. RSS (aka RDF Site Summary or Rich Site Summary, depending on whom you ask) is the standard way of delivering headlines to the Web masses. It's much like HTML in that it's a markup language. If you'd like to let your site fans know about the big headlines of the moment (even if you just want to keep your friends and family updated about your so-called life), here's how to create your very own news feed.

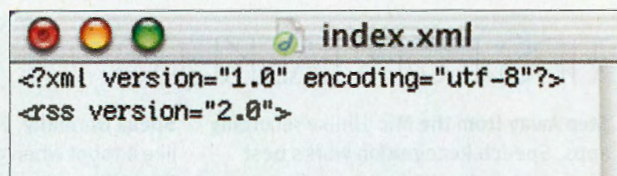
- 1 Make It Plain, TextEdit** Launch TextEdit to open a new document. From the Format menu, select Make Plain Text (if TextEdit isn't already set to open PlainText as its default). From the File menu, select Save; in the resulting dialog, type *index.xml* in the Save As field,



select Unicode (UTF-8) from the Plain Text Encoding pop-up menu, and click Save.

In TextEdit, create a plain-text document to serve as your RSS code sheet.

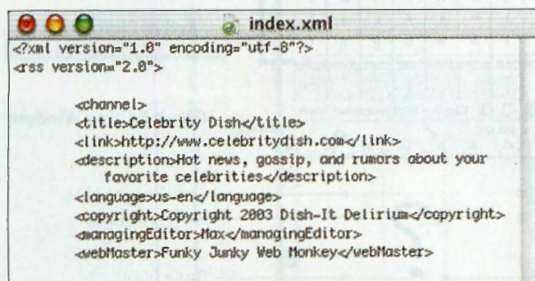
- 2 Define XML and RSS** Because RSS is XML-based, you must first specify the XML version you want to use and the encoding. In the first line of your document, type, `<?xml version="1.0" encoding="utf-8"?>` to do this. The next line describes what version of RSS the file uses. Current news tickers can handle both RSS 1.0 (RSS-DEV) and RSS 2.0 (Userland) feeds. Because RSS 2.0 is much easier to use (RSS 1.0 is more verbose), type `<rss version="2.0">` in the second line. Then press Return twice to create a line break.



Define what version of XML and what type of encoding to use in the first line.



**3 Create a Channel** The next block of code creates an RSS channel for your Web site and operates much like a TV channel—it's your brand. The `<channel>` element features several subelements, displaying information about your site to viewers. Press the Tab key, type `<channel>`, and press Return. Then give your site a title: Press Tab, type `<title>`, type the name of your site, and then type `</title>` to end the code. To add your Web address, press Return, Tab. Then type `<link>`, your site's URL, and `</link>`. Our screenshot shows the other required elements and a few optional ones. Just copy our code, but apply your own variables.

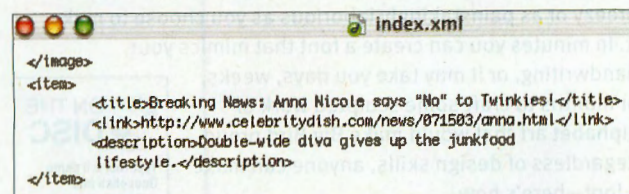


```
<?xml version="1.0" encoding="utf-8"?>
<rss version="2.0">

  <channel>
    <title>Celebrity Dish</title>
    <link>http://www.celebritydish.com</link>
    <description>Hot news, gossip, and rumors about your
      favorite celebrities</description>
    <language>us-en</language>
    <copyright>Copyright 2003 Dish-It Delirium</copyright>
    <managingEditor>Max</managingEditor>
    <webMaster>Funky Junky Web Monkey</webMaster>
```

Create an RSS channel for your site to establish who you are.

**5 List Your Headlines** Create a line break, press Tab, and type the subelement `<item>`. Press Return, press Tab twice, type `<title>`, type in your headline news flash (one short sentence), and end by typing `</title>`. Press Return and press Tab twice. Then type `<link>`, the URL to the full story on your site, and `</link>`. Press Return and press Tab twice. Type `<description>`, enter a short synopsis of your story, and type `</description>`. End the item listing by pressing Return, then Tab, and typing `</item>`. Repeat for other headlines. When finished, type `</channel>` on a new line to complete the channel code, press Return twice, type `</rss>` to end the RSS file, and save it.



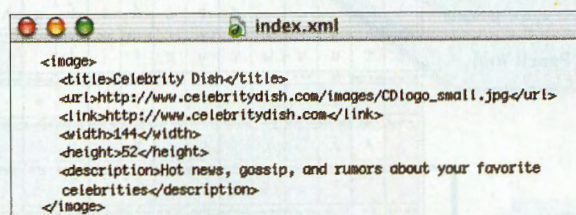
```
</item>
<item>
  <title>Breaking News: Anna Nicole says "No" to Twinkies!</title>
  <link>http://www.celebritydish.com/news/071503/anna.html</link>
  <description>Double-wide diva gives up the junkfood
    lifestyle.</description>
</item>
```

You can create as many headlines as you want—just list each one under its own `<item>` listing.

**7 Feed Me** To view your feed, you need a news-ticker app—we're using NetNewsWire Lite. Launch the ticker and click the Subscribe button. In the resulting panel, enter your RSS file's URL and click OK. Once it loads, click your site's name in the Subscriptions panel, and then click a headline to view it. Looks good, doesn't it? Click the headline again in the description panel to open the article in your default browser—bravo! Then just give your audience the RSS file's URL so they can subscribe to it themselves. To update news, just change the `<items>` stuff in the index.xml file.

Mary E. Tyler is a tech journalist who firmly believes that no news is not good news.

**4 Link a Logo** An RSS channel can also display a logo. To do this, create a couple of line breaks (press Return twice), press Tab, and type the subelement `<image>`. Press Return, press Tab twice, and type `<title>`. Type your logo's name, and then type `</title>`. Press Return and press the Tab key twice. Then describe where to find the graphic by typing `<url>`, the server location of your logo, and `</url>`. Again, copy our code, but use your own variables. For the `<link>` element, type the location to which you want to take viewers when they click your logo (say, your home page). RSS displays logos at a default 88 pixels wide by 31 pixels high, but you can dictate your own size using the `<width>` and `<height>` elements (the maximum is 144 by 400 pixels). Finish the code by typing the ending subelement `</image>`.



```
<image>
  <title>Celebrity Dish</title>
  <url>http://www.celebritydish.com/images/CDlogo_small.jpg</url>
  <link>http://www.celebritydish.com</link>
  <width>144</width>
  <height>52</height>
  <description>Hot news, gossip, and rumors about your favorite
    celebrities</description>
</image>
```

To add a logo, just use the `<image>` element code and then tell the file where to find it using the `<url>` element.

**6 Validate Your File** Time to upload your news feed to your server. Using your FTP method of choice, upload the index.xml file into the same directory as your home page. But before you publicize your news feed, first make sure it's working by validating it. Head over to Userland's RSS Validator site (<http://aggregator.userland.com/validator>), type the URL to your index.xml file in the field, and click Validate. If you've made any errors, the site will list them for you to fix. Otherwise, it'll give you the green light to tell the world.

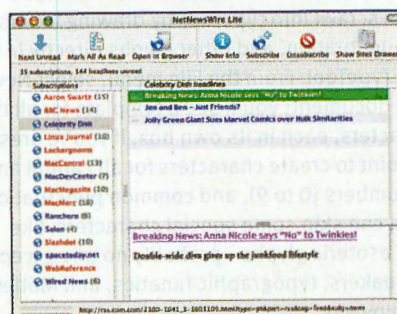


Aggregator.Userland.Com  
Register XML files with Userland.Com's news flow aggregator.

RSS Validator  
Enter the URL of your RSS file:  
<http://www.celebritydish.com/index.xml>

Where to go for help  
There are pointers on the [home page](#) of this site.

Userland will check your server-stored RSS file to ensure that you haven't made any mistakes.



NetNewsWire Lite  
21 subscriptions, 144 headlines unread

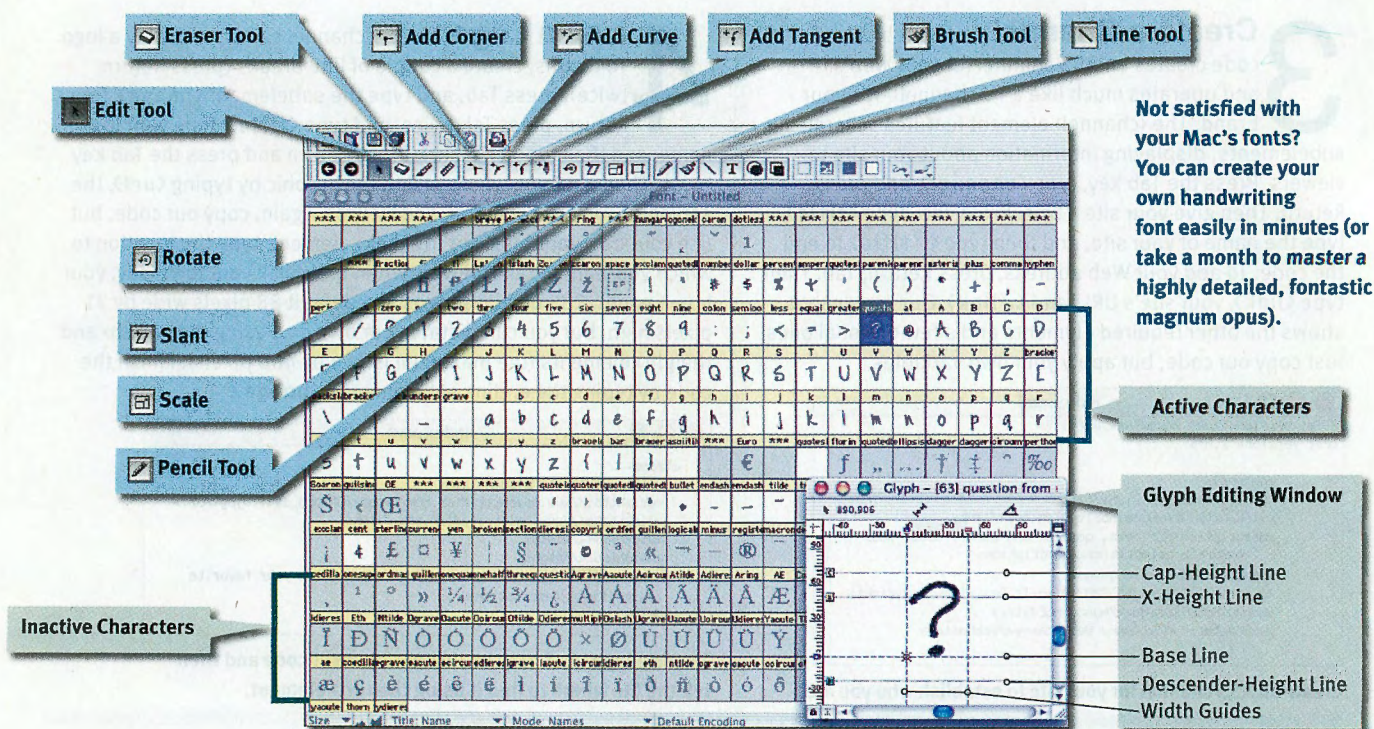
Subscriptions  
 - Aaron Swartz (15)  
 - BBC News (14)  
 - Celebrity Dish  
 - Linux Journal (10)  
 - LinuxJournal  
 - MacCentral (13)  
 - MacDevCenter (7)  
 - MacMagazine (10)  
 - MacRumors (8)  
 - Ramblers (8)  
 - Solaris (6)  
 - Slashdot (10)  
 - sxciteaday.net  
 - WebReference  
 - Wired News (6)

Breaking News: Anna Nicole says "No" to Twinkies!  
 -- Jen and Ben - Just Friends?  
 -- Jolly Green Giant Stars Marvel Comics over Hulk Smurrities

Breaking News: Anna Nicole says "No" to Twinkies!  
 Double-wide diva gives up the junkfood lifestyle

Once you tell a news ticker to subscribe to your site, it'll stream in the headlines based on your RSS file.





# Design Your Own Font

by Paul Yoon



## WHAT YOU NEED

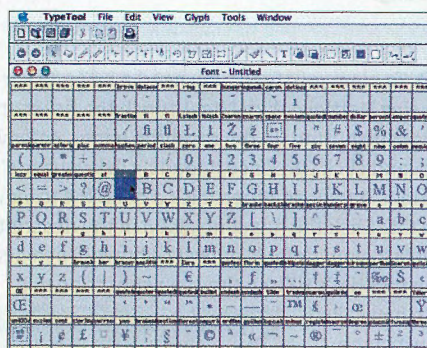
- TypeTool 2 (\$99, [www.fontlab.com](http://www.fontlab.com))
- Drawing tablet (optional) such as the Graphire2 (\$99.95, [www.wacom.com](http://www.wacom.com))

Those quirky handwriting analysts say they can determine brains and personality by studying how we dot our i's and cross our t's on paper. Maybe they could say the same of our font choices. Oh, the things one can say about a guy who prints his résumé in a blood 'n' daggers typeface—or worse, uses hearts as bullet points.

In our personal documents, we tend to choose fonts that show our sense of style or design aesthetic, or that capture a mood. While a gazillion and one fonts are available on the Internet to satisfy just about every need, sometimes it's impossible to find that perfect typeface you envision in your head. Luckily, designing your own font can be as easy breezy or as painstakingly laborious as you choose to make it. In minutes you can create a font that mimics your handwriting, or it may take you days, weeks, or months to craft some sculpted work of alphabet art that would make Big Bird proud. Regardless of design skills, anyone can make a font—here's how.



**1 Fire Up the App** TypeTool comes with a full complement of vector drawing tools that allow you to transform scrawl into typeface by drawing letters, numbers, punctuation, and other glyphs directly in the application. Launch TypeTool. From the File menu, select New to open a blank font document; you'll see a template for all the standard Latin characters, each in its own box. If you're pressed for time, make it a point to create characters for all capital and lowercase letters, numbers (0 to 9), and common punctuation, at the very least. You can skip some special characters, like umlauts, tildes, and esoteric glyphs—probably no one except foreign-language speakers, typographic fanatics, and Mötley Crüe will miss them anyway.

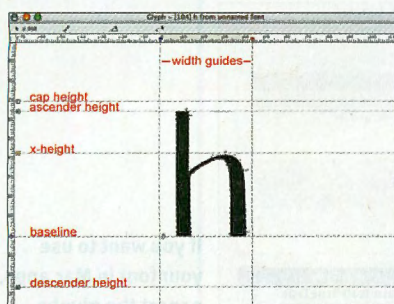


TypeTool provides a template that displays standard Latin characters, so you can keep track of glyphs as you design them.



## 2 Digitize Your Chicken Scratch

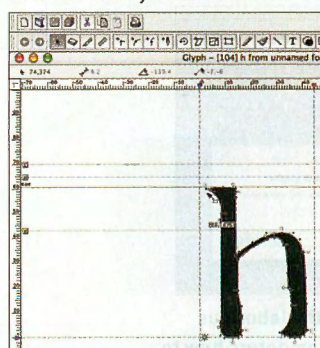
OK, let's draw. Double-click any letter box to open its editing window. To keep characters uniform in size, pay attention to the guidelines, but feel free to adjust them to suit your needs before you start—select the edit tool, then click and drag any line to move it, or click and drag from the ruler to create a new line. Then select the pencil tool (for skinny lines) or the brush tool (for weightier strokes), and sketch out the letter—either in your own handwriting (if you have no patience) or in a particular style. Try to keep characters grounded on the baseline and between the width guides. Align capital letters with the cap-height line. Align lowercase letters with the x-height line, except for those with ascenders (*b, d, f, h, i, j, k, l, and t*)—align the tops of these letters with the cap height, or create an ascender height line for variation. For letters that dip below the baseline (*g, j, p, q, and y*), align their bottoms with the descender height line.



Use TypeTool's guides to keep your characters uniform in size, but it's perfectly OK to have lines go slightly over or under any line.

## 3 Sculpt Your Strokes

As you draw, your strokes appear as editable vector art—that means you can alter the letter's size and shape by dragging points around. This can become a trial-and-error mess if you've never worked with vectors before—you might want to stick with creating a handwriting font for now to avoid the aggravation. If you want to alter one, select the edit tool, click either a point or a handle (points that alter curves), and drag it to change the shape. Use the add point, add curve, or add tangent tools to modify precise parts of a stroke. If you don't like a stroke, Command-Z it bye-bye or use the eraser to delete points. When you're finished, close the window and repeat steps 2 and 3 for all other characters that are important to you. The template displays active characters inside a white box, inactive ones inside a grayish background—double-check to make sure you didn't leave anything out (don't forget to

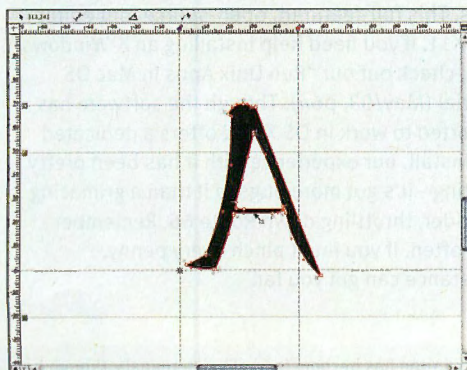


double-click the Space glyph box to engage it even though you won't need to edit it).

Using the edit tool, we clicked and dragged key points to sculpt some curvy serifs.

## 4 Adjust to Taste

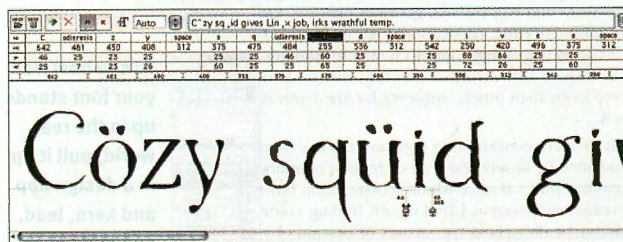
Unless you've managed to draw your letterforms with perfect consistency, you'll most likely need to fiddle with the individual glyphs a bit more—they tend to look pretty different in close-up editing mode, and something you thought was cool or interesting may suddenly look indecipherable or lame when shown zoomed in or at a display-type size. Take a gander at your character designs in the template's individual boxes. This gives you an idea of what your type will look like in use. If you need to make adjustments, pull points around with the edit tool so that the strokes (line thicknesses) of your letters are similar and consistent—use the ruler measurements as a guide.



After drawing all of our characters, we went back through to make sure we'd perfectly aligned each one within the guidelines we set in step 2.

## 5 Kern, Baby, Kern

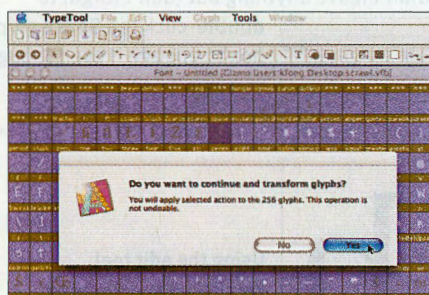
Once you've got your glyphs looking gorgeous, clean up their spacing. TypeTool lets you adjust the amount of space between characters by establishing sidebearings (the amount of space surrounding any given glyph) and kerning (space inserted between two specific letters to compensate for inconsistencies: for example, between *f* and *l* (that's a lowercase *L* as in *lunkhead*). From the Window menu, select New Metrics Window and click the auto tool (the green diamond icon). In the resulting dialog, click OK to have TypeTool calculate the metrics automatically. Select a phrase from the right-side drop-down menu, or type something (like a pangram, a phrase that comprises all letters of the alphabet) in the field to get a preview of your font. If you need to adjust the general spacing (sidebearings), click the M button and click an affected letter. Drag the handles that appear below it to open up or close the space until things look balanced. Repeat the process to fix any other inconsistencies. To adjust spacing for individual letters (kerning pairs), click the K button and adjust in the same manner.



To keep everything in our font balanced, we adjusted the space surrounding some problem letters.

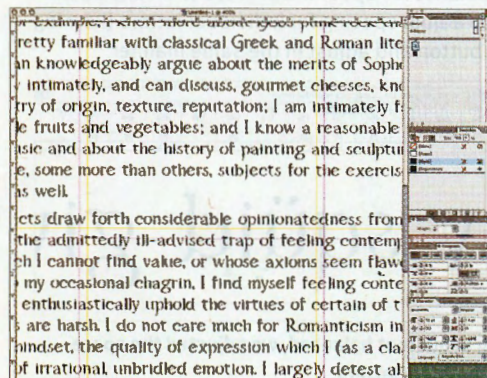


**6 Take a Hint** Hints (also called instructions) are guides that tell your computer how to *rasterize* a font (convert it from its native vector format into pixels or dots). Hints control how a font prints or how it's displayed onscreen at small point sizes, determining which pixels get displayed and which don't. Because thin lines tend to fall unevenly when scaled, a poorly hinted font looks chunky or strangely spaced when you size it down. Hinting fonts manually is complicated enough to merit its own how-to article, but luckily TypeTool will do the hinting for you. In the template, select all (Command-A), and from the Tools menu, select Hints & Guides, then Autohinting. A dialog will appear, warning you that the operation is not undoable—click Yes. TypeTool processes your glyphs and encodes them as a PostScript Type 1 font (the default).



**Hard-core font designers have the laborious task of creating hints that tell computers how to rasterize glyphs—thankfully, TypeTool handles this task for you.**

**8 Install and Admire** Once you've got your font suitcase, install it on your system for application use. If you're selfish, drag and drop the suitcase into your own Fonts folder (Users > *user name* > Library > Fonts), and you'll have sole access to it. If you want to make it available to all users who share your Mac, stick the suitcase in System > Library > Fonts. Then launch any app that supports text to test it out. To really put the font through its paces, launch a design app like Adobe InDesign or QuarkXPress, type some text using your font, and then play with the kerning, leading, and text-style effects to see how your font stands up. If certain characters don't hold their own or words don't flow together smoothly, reopen your font file in TypeTool, make the necessary adjustments, and reissue a new suitcase.



**To see how well your font stands up in the real world, pull it up in a design app and kern, lead, and style away like there's no tomorrow.**


**7 Edit, Encode, Export** To name your font, select Font Info from the File menu. In the resulting dialog, type a name in the Family Name field and select an appropriate weight from the Weight pop-up menu. Click the Build Style Name and Build Names buttons to fill in the other fields automatically. If you want to give yourself credit, select other choices under Names and Copyright and fill in the fields accordingly. When you're done, click OK and save your font template—TypeTool saves it as a FontLab font file. To make your font usable, select Generate Mac Suitcase from the File menu. In the resulting dialog, select Macintosh Type 1 from the Select Destination Format pop-up menu and click OK. In the next dialog, choose where you want to save your font, and then click Save. If you want to share your font with any peecce punks, select Generate Font from the File menu, select PC Type 1 from the Font Format pop-up in the resulting window, and click Save.



**If you want to use your font in Mac apps, export the glyphs by generating a font suitcase.**

## FREE FONT TOOL FOR REAL CHEAPSKATES

For those who are on a budget and who don't fear the command line, PfaEdit (<http://pfaedit.sourceforge.net>) allows you to create your own fonts or edit others in PostScript, TrueType, OpenType, and other font formats. This full-featured, open-source font editor runs in X11. If you need help installing an X-Windows system, check out our "Run Unix Apps in Mac OS X" tutorial (May/03, p64). Though the software has been ported to work in OS X and offers a dedicated binary install, our experience with it has been pretty frustrating—it's got more bugs in it than a grimacing Harley rider, throttling down Route 66. Remember to save often. If you must pinch every penny, perseverance can get you far.

 Paul Yoon has become fond of ball terminals, though he's convinced it's a passing fancy. His featured Goosefish font (licensed under the Creative Commons license) is named after one of the ugliest animals alive.



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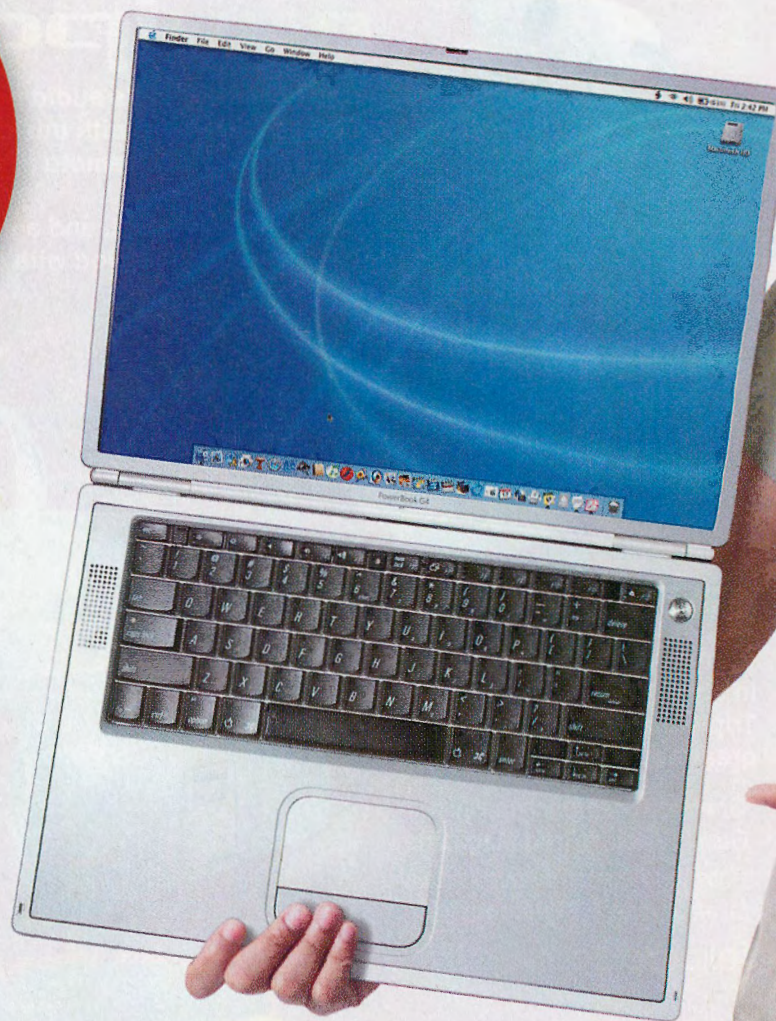
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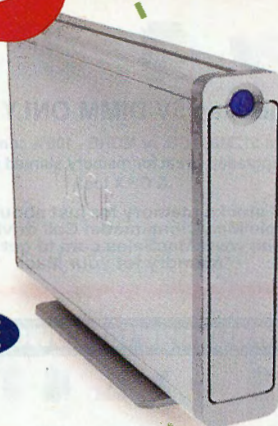
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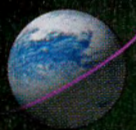
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MyMac.com review 5 out of 5

### MacAddict 'Great' Review 7/03

"...when opening a 2GB Photoshop file, The Mercury Elite Pro[F800] opened it over 13 Percent faster than both the LaCie D2[F800] and the 120GB Seagate Barracuda ATA V inside our...Dual 1.42GHz PowerMac."

### James Coates of the Chicago Tribune:

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Charles Carr from Computer Edge about buying an OWC Mercury drive: "You'll probably be happy you did." 4 out of 5. "The Elite is ideal for professionals and consumers who need convenient, portable storage for large amounts of data."



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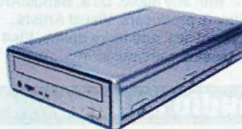


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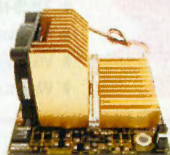
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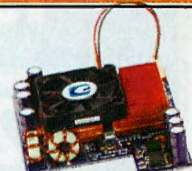
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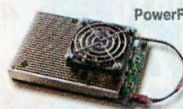
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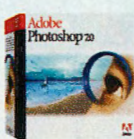
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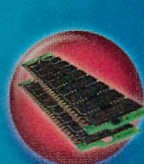
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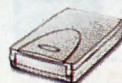
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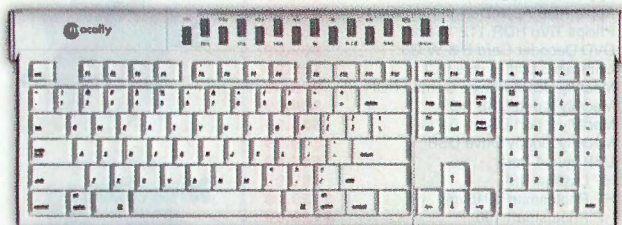
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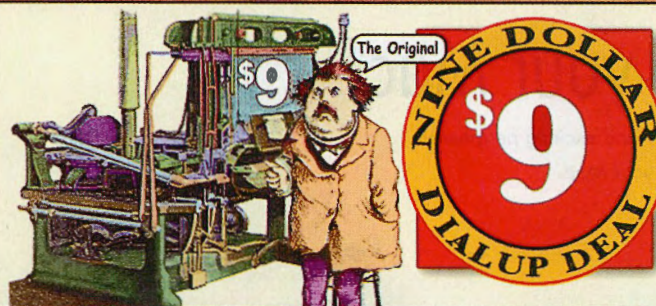
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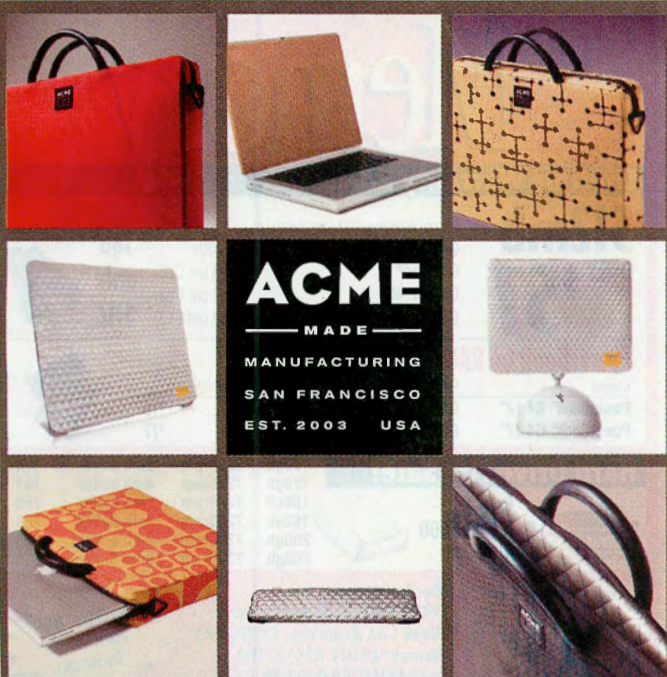
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did find MacCoffee. Now if only they made MacBagels.  
—Gary A. Holmes  
You know MacCoffee's not from Apple—if it were, it'd be called iCoffee.—Max

## HE'S CRAFTY

I'm a 13-year-old Mac user in Canada. I made this clock in the wood shop at the high school I attend.—Ian Strom  
Pretty cool, Ian. Your next project should be a balsa wood Rolex knock-off.—Max



## LARA AU NATUREL

I'd like to debunk John Lee's assertion that a "secret 'nude' code" in Tomb Raider doesn't exist ("The Next Level," May/03, p34). While there is no secret code within Tomb Raider that creates a nude Lara Croft, there are a ton of third-party "NudeRaider" patches that remove Lara's outfits.  
—Chris Calvert  
Yeah, and they're all peecee-only—though definitely not PC.—Max

## Dear Max

Your beacon of ethics and etiquette

Dear Troubled:  
Remember, your crust of bread may be someone else's slice of cake. While you're under no moral obligation to keep the Apple II GS, at least offer it up on eBay or donate it to CARE along with your uneaten brussels sprouts.—Max

Dear Max,  
I recently remodeled my house, an endeavor that required me to remove 16 years of accumulated stuff. The question arose: How long am I ethically, morally, and emotionally required to provide a home for my first Apple IIGS? Sincerely,  
Troubled (aka Alex Boomer)

## CAR TALK

Great review of F1 Championship Season 2000 in the April 2003 issue (Reviews, p60). The members of my club and I especially liked the "Go, Minardi!" line. It pretty much sums up what we are all about. Keep up the good work and remember to support Minardi!—Emmett Quigley, President, Minardi Club San Francisco



MacPlay puts Minardi on your Mac.

Ah, the glam world of Formula 1 racing. Minardians wouldn't associate with MGD-swilling crews in the NASCAR pits.—Max

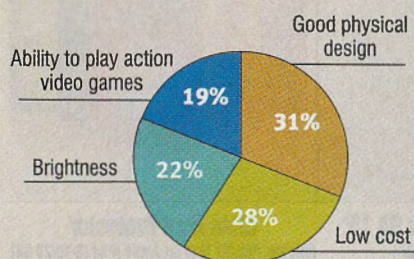
## FUZZY ABOUT FIREWIRE

In your article "Inside FireWire 800" (Get Info, May/03, p14), you say FireWire 800 will reach 3.2 gigabits per second. How can FireWire 800—named for its 800 Mbps speed—support 3.2 Gbps using the same interface connection?  
—Donny

The IEEE-1394b FireWire technology FireWire 800 is built on is capable of reaching 3.2 Gbps—eventually. No doubt the interface will change.—Max

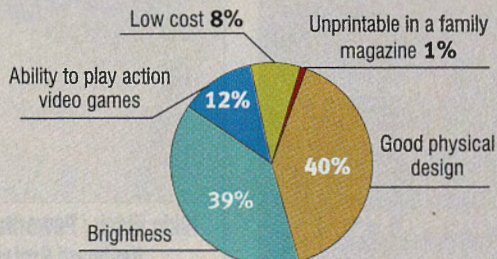
## SURVEY SAYS Online Poll Results

## What do you look for in an LCD Display?



610 respondents

## What do you look for in a mate?



610 respondents

MacAddict  
READER  
POLL

Q On average, how many junk email messages (aka spam) do you receive in a day?

Q What percentage of that email is lascivious rubbish?

To answer, click Reader Poll at [www.macaddict.com](http://www.macaddict.com) before July 10, 2003. See our October 2003 issue for the results. Check [www.macaddict.com](http://www.macaddict.com) for a new poll each month.



## 38 GOING ON 8

To all my friends who said it would never happen: Neener, neener, neener! I finally got my 17-inch PowerBook!

—Daniel M. Becker

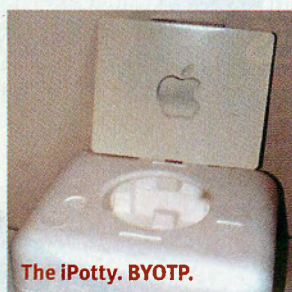
Must...resist...urge...to...  
release email address...to  
rabid masses...seething with  
jealousy.—Max

## CROSSOVER CONFUSION

In the story "Shuttle Files Across Ethernet," (*How To*, May/03, p73), you mention the need to use a crossover cable to network two Macs. Wrong. Most Macs made in the last few years require only a standard Ethernet cable—they're smart enough to manage the crossing-over themselves.—Kerry Murphey  
You're right. Most current Macs don't need a crossover cable; however, some (such as the eMac) still do. For a complete list, check out the AppleCare KnowledgeBase ([www.info.apple.com](http://www.info.apple.com)) document titled "Macintosh: Apple Products That Require an Ethernet Crossover Cable" (Article ID: 42717).—Max

## BATHROOM HUMOR

Having toddlers inspires new and amazing insights. As I was unpacking a new iBook from its cardboard box, something looked strangely familiar, and then it hit me: Apple's New iPotty! It's stylish, fun, and free with the purchase of a new iBook.  
—Chad Sanborn



I'd hate to have to clean out that thing.—Max

## ON THIN ICE

In his test drive of Postworx's Freestyle Speedball notebook risers (*Reviews*, May/03, p59), Niko Coucouvanis describes how an iBook "skated across the table like a manlier Scott Hamilton." I'm not sure how a shoved laptop can move in a manly or an unmanly fashion, but I am sure that Mr. Coucouvanis's homophobia is showing.  
—Robert Yanal  
Niko assures me he meant no disrespect to either set of *cojones*—Postworx's or Hamilton's. Just call it a simile that skated out of control.—Max

## GOTCHA!

The Sims Fall on Hard Times expansion pack (*Shut Down*, Jun/03, p96) is fake, right? I fell off my chair laughing and sprained my wrist. Someone should make it. I would seriously buy it.—Hyper!  
I've approached Aspyr, the Mac publisher of The Sims series, but they're not returning my calls.—Max

## NEXT MONTH

- **PANTHER: THE NEXT MAC OS**  
Learn about all the power Apple is planning to give to its next Mac OS X feline.
- **SECOND ANNUAL MACADDICT GEEK QUIZ**  
Do you have what it takes to match wits with the MacAddict hypergeeks? Find out.
- **RUN ANCIENT APPS IN JAGUAR**  
Learn how to run your most archaic apps in the latest OS. Draw It Again, Sam—anyone?

## WIN A 23-INCH SONY DISPLAY



It's gorgeous. It's expensive. It could be yours. Sony's PremierePro 23-inch flat-panel LCD display (shown here; \$2,599.99, [www.displaysbysony.com](http://www.displaysbysony.com)) has a 16:10 aspect ratio—great for watching DVDs—and a 1920-by-1200-pixel resolution. To win, just write the wittiest caption for the picture below and send it in.

This PremierPro 23-incher will look even better on your desk.

## ENTRY FORM



Write a caption for this picture.

### CONTESTANT INFORMATION

Full Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State: \_\_\_\_\_  
Zip: \_\_\_\_\_  
Email or telephone: \_\_\_\_\_

Send snail-mail entries to: Sony PremierePro Contest  
MacAddict magazine, 150 North Hill Dr., Brisbane, CA 94005

Deadline for entry: August 30, 2003.  
Contest results will appear in our Dec/03 issue.

### Contest Rules

The judges will be MacAddict editors, and they will base their decision on 50 percent humor and 50 percent creativity. All entries must be received no later than August 30, 2003, with the winner announced around December 2003. By entering this contest, you agree that Future Network USA may use your name, likeness, and Web site for promotional purposes without further payment. All prizes will be awarded and no minimum number of entries is required. Prizes won by minors will be awarded to their parents or legal guardians. Future Network USA is not responsible for damages or expenses the winners might incur as a result of this contest or the receipt of a prize, and winners are responsible for income taxes based on the value of the prize received. A list of winners may also be obtained by sending a stamped, self-addressed envelope to Future Network USA c/o MacAddict Contest, 150 North Hill Dr., Brisbane, CA 94005. This contest is limited to residents of the United States. No purchase necessary; void in Arizona, Maryland, Vermont, Puerto Rico, and where prohibited by law.

## WINNER! True Colors Contest Results

Congratulations to **Deborah M. Roach** for winning our True Colors contest, in which we asked you to send us an image that represents the glowing wonderfulness of your inner hues. She wins Epson's Stylus Photo 960 photo printer (retail value \$349, [www.epson.com](http://www.epson.com)).



Deborah says, "My day is gray, but my color is music."



# THE POWER OF THE WIDGET

A Bad Product. A Bad Review. A Mega Bummer.

In last month's *MacAddict*, reader Danny Soto wrote to ask why we hadn't yet given any product a zero-widget rating. Max's response (that we were waiting to bestow that horrific honor until we met a product that was heinous to the point of being dangerous) was incorrect. We regret the error.

In fact, we bestowed the dreaded zero-widget rating once—and only once—and to the misfortune of many. The Colonotech MicroNukie Pro III Deluxe Gold Studio Edition X (see right) was the all-too-deserving recipient. Our own experience with this vicious and deadly product, in conjunction with the dreadful aftermath of our scathing review, has made us wary of ever again rating a product *Damned*. Read on for the sad saga.



It took the exhaustive efforts of an FBI forensics team to explain the mighty blast that reduced the *MacAddict* staff from its former 15 to its current skeleton crew of 8, but we editors knew what it was well before the gumshoes announced their findings. It was the Colonotech MicroNukie Pro III Deluxe Gold Studio Edition. Our duty was clear—or so we thought. We gave it the dreaded zero-widget rating.

A *MacAddict* review is a powerful force for good—or for evil. Although the MicroNukie Pro III Deluxe Gold Studio Edition richly deserved its no-widget rating, we didn't anticipate that Colonotech's founder would abscond with his company's few remaining funds and abandon his hometown to whatever fate awaited it.



The closing of Colonotech thrust Dismal into chaos. Unemployed and desperate ex-Colonotechers went on a rampage, first pillaging their now-abandoned plant, then looting the estates of their ex-managers, and finally taking out their rage on the entire town. The tragedy that began with the loss of seven of our best and brightest had now ended. The moral is clear: A no-widget review is a fearsome responsibility.



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\*See Web site for details.

Prices may vary according to specific system requirements. The price listed was valid on 5/30/03 when we sent this ad to the publisher; however, prices may have dramatically increased or decreased since then. Visit the FAQ section of [Crucial.com](http://Crucial.com) to learn more about why memory prices go up and down.

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